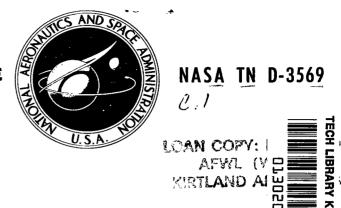
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by John H. Lewis, Jr., and William I. Scallion

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SUMMARY

Project Fire was undertaken by the National Aeronautics and Space Administration to investigate the heating environment of vehicles entering the earth's atmosphere at velocities slightly higher than those associated with the return from a lunar mission. The second and final flight successfully placed a blunt-nose reentry vehicle into the desired reentry environment.

A description of the flight and spacecraft performance is presented. Data from the tracking facilities were utilized to define the reentry trajectory. Sufficient data were obtained from tracking facilities and onboard systems to permit an accurate assessment of vehicle performance, activation of events, and the characteristics of the atmosphere through which the experiment was conducted.

INTRODUCTION

The purpose of Project Fire is to determine the hot-gas radiance and the total heat-transfer rates on a blunt-nosed body of fairly large scale at a velocity of approximately 11.3 kilometers per second. The data resulting from the flight are intended to provide anchor points for comparison with data obtained from ground facilities and theoretical prediction methods. The primary purpose of this second flight reentry experiment in the Project Fire series is to confirm and supplement the data obtained from the first flight.

The second Project Fire vehicle was launched at 21:54:59.703 Greenwich mean time on May 22, 1965, from Cape Kennedy, Florida. The flight terminated with the impact of the experimental payload into the Atlantic Ocean near Ascension Island.

The purpose of this report is to document the vehicle performance and the experimental conditions as defined by the reentry trajectory and to describe the unique portions of the space vehicle.

MISSION AND VEHICLE DESCRIPTION

Flight Objectives

The major objective of the second flight, like that of the first, was to place the reentry package in an atmospheric entry environment with a velocity of approximately 11.3 kilometers per second (37 000 feet per second) or greater and at an entry angle of -15°. The velocity was chosen to be representative of that of vehicles returning from missions to the moon and the near planets. The entry angle was selected as a compromise between the values needed to enhance gas radiation levels and those which would insure the survival of the reentry package and its state-of-the-art instrumentation. The desired altitude for attainment of the selected reentry trajectory parameters was 121 920 meters (400 000 feet). This altitude was designated the beginning of the reentry experiment.

The space vehicle was launched from Cape Kennedy along the Eastern Test Range (ETR) to permit reentry into the Ascension Island area. A photograph of the space vehicle at lift-off is shown in figure 1. The reentry portion of the trajectory was arranged so that radar tracking, data acquisition, and optical instrumentation on Ascension Island could be utilized. Launch of the space vehicle was timed to insure complete darkness along the reentry flight path during the experimental period.

As a result of the postflight evaluation of data obtained on the first flight, the trajectory for the second flight was slightly altered. The alteration consisted of reducing, by approximately 157 kilometers (85 nautical miles), the ground range from the launch point to the reentry test point and changing the flight azimuth to provide a closer passage of the ground track to Ascension Island. The overall result of the trajectory change was to enhance the ground-based optical coverage during the experimental period.

Space-Vehicle Components

The Project Fire space vehicle shown in figure 2 consists of a powered spacecraft, composed of a velocity package with an Antares rocket motor and a reentry package, mounted atop an Atlas D launch vehicle. The spacecraft also includes an aerodynamic shroud which protects the velocity package and the reentry package from aerodynamic heating during ascent through the atmosphere. Adapters provide structural and electrical interfaces between the launch vehicle, velocity package, and reentry package. A cutaway view, an exploded view of the spacecraft, and a sketch of the aerodynamic shroud are presented in figure 3. A complete breakdown of the spacecraft mass is given in table I. The physical characteristics of the velocity package and the reentry package, together with some pertinent dimensions, are given in tables II and III, respectively. A sectional sketch of the reentry package, which is the experimental portion of the Project Fire vehicle and which contains the primary data-gathering systems, is shown in figure 4.

The spacecraft configuration for flight II was the same as that used in the first flight, except for two additions which were made to correct a problem of aerodynamic interference between the spent reentry stage and the reentry package. A detailed description of the flight 1 spacecraft and the interference problem is given in reference 1. The two additions to the configuration are as follows:

- (1) An additional small rocket (1KS210) was mounted on the reentry package adapter. The added rocket was oriented to provide a purely retrograde thrust to the spent reentry stage. The existing rocket (1KS210) was reoriented from an attitude which provided retrograde, despin, and lateral-translation components of thrust to an attitude providing primarily despin and lateral-translation components with little or no retrograde component. Henceforth in this paper, these rockets shall be referred to as separation rockets.
- (2) A 90° annulus drag plate, shown in figure 3(a), was mounted between the forward face of the Antares II-A5 rocket motor and the reentry package adapter.

A photograph showing these two additions to the flight configuration is presented in figure 3(d).

Sequence of Events

The sequence of events for Project Fire flight II was the same as that for flight 1. Nominal times for the activation of events are slightly different for flight II because of the trajectory change discussed in the section on flight objectives. A chronological description of the events is given in reference 1. In order to provide background information for the discussion of the flight II results, the Project Fire mission profile showing the major sequence of events is shown in figure 5. In addition, a functional diagram of the Project Fire sequence of events for flight II showing the signal paths across the vehicle interfaces and the backup functions is shown in figure 6. It should be noted that the spacecraft changes, discussed in the section on space-vehicle components, did not change the flight II sequence of events. The additional separation rocket was fired simultaneously with the original rocket to disturb the attitude of the spent reentry stage and translate it out of the wake of the reentry package. This translation and attitude disturbance served to increase the aerodynamic drag of the spent reentry stage and to enhance its separation from the reentry package.

DESCRIPTION OF FLIGHT AND VEHICLE PERFORMANCE

The Project Fire space vehicle was launched from Cape Kennedy, Florida, on May 22, 1965, at 21:54:59.703 Greenwich mean time. The flight consisted of four phases: the boost phase, which ended with spacecraft separation from the launch vehicle; the coast

phase, which ended with Antares II-A5 ignition; the reentry-stage acceleration phase, which ended with Antares II-A5 burnout; and the separation and reentry phase.

Boost and Coast Phases

The boost and coast phases of flight, from lift-off to ignition of the Antares II-A5 rocket motor, occurred very nearly as planned. A measure of the launch-vehicle performance can be obtained from figure 7, which presents data obtained from the ETR tracking facilities. Figure 7(a) presents altitude as a function of elapsed time and ground range from the launch site. Relative velocity and flight-path angle as functions of elapsed time are presented in figure 7(b). Figure 7 indicates that the launch vehicle and its guidance system provided a near nominal ascent and coast trajectory.

All launch-vehicle events occurred within allowable limits of their expected times. Separation of the aerodynamic shroud was very smooth. Small disturbances were noted when the shroud separated, but these disturbances were expected and were quickly damped out. The spacecraft separated smoothly from the launch vehicle. The maximum angular rates imparted to the spacecraft were approximately 1.6 degrees per second nose-up in pitch. No disturbances were noted in yaw or roll.

Accuracy of the initial attitude reference of the spacecraft as provided by the launch vehicle, the attitude following the spacecraft pitch maneuver, and the coast stabilization attitude were not individually determinable. However, trajectory-parameter errors at the 121 920-meter (400 000-foot) reentry injection point were within the expected dispersion bounds and indicated small initial misalinement of the reference, accurate programing of the pitch maneuver, and small amounts of system drift during coast.

Satisfactory performance of the spin motors resulted in an initial spin rate of 158.6 revolutions per minute as compared with a predicted rate of 158 \pm 11 revolutions per minute. The achieved spin rate was determined by examination of signal-strength records from a trihelix-telemetry-antenna system located on Ascension Island.

Following spin stabilization, the velocity-package shell cleanly separated from the reentry stage. Within the limitations of the reentry-package instrumentation, no coning motion could be detected.

Reentry-Stage Acceleration Phase

The performance of the Antares II-A5 solid-propellant rocket motor was completely satisfactory. The flight data indicated that the actual performance closely approximated that which was expected and that the velocity increment imparted to the reentry package provided a reentry velocity which satisfied mission requirements.

Radar tracking information and onboard acceleration measurements were utilized to evaluate the Antares II-A5 performance. The onboard acceleration measurements were made by accelerometers mounted in the reentry package. An accelerometer capable of measurements from 0g to 45g was mounted along the longitudinal (roll) axis, and three accelerometers capable of measurements from -6g to 6g were mounted along the longitudinal (roll), transverse (pitch), and normal (yaw) axes. Data from these accelerometers were obtained through a commutated channel in the reentry-package telemetry system. This commutated channel provided 5 data points per second for the 0g to 45g longitudinal accelerometer, 10 data points per second for the -6g to 6g longitudinal accelerometer, and 20 data points per second for the transverse and normal accelerometers. Radar tracking information was obtained from the FPS-16 and TPQ-18 radar units (C-band) on Ascension Island.

Figure 8 presents the variation of velocity with time during the reentry-stage acceleration phase. This figure is a comparison of the expected velocity variation with that obtained by reducing the data obtained by the TPQ-18 and FPS-16 radars, and onboard accelerometer measurements. As can be seen from the figure, the radar and accelerometer data agree very closely with that expected. The data indicated that the radar data would most accurately reflect the final velocity conditions at burnout. The data provided by the primary radar, the TPQ-18, were used to determine the performance of the Antares II-A5.

The results of the Antares II-A5 performance as evaluated from flight data (ref. 2) are shown in figure 9. Figures 9(a) and 9(b) present the variation with elapsed time from motor ignition of thrust and mass-flow rate, respectively. Total impulse of the rocket motor was 3 178 293.2 newton-seconds (714 512.2 lb-sec), as compared with an expected value of 3 179 738.4 newton-seconds (714 837.1 lb-sec) for this particular motor. The consumed-mass average specific impulse was determined to be 2 706.44 newton-seconds per kilogram (275.98 lb-sec per pound). It should be noted that the residual thrust shown after 33 seconds (fig. 9(a)) is an estimate and does not necessarily represent the actual residual thrust, since the data-gathering devices were not sufficiently sensitive to define the performance in this region.

The performance of the Antares II-A5 rocket motor proved to be predictable for both Project Fire flights. The average specific impulse for each flight motor was virtually the same, as would be expected since each motor used the same propellant grain composition and exit nozzle configuration. The task of performance prediction was then reduced to gathering specific data on each flight motor. These specific data were furnished by the contractor upon delivery of the motor. The following table presents a quantitative comparison of predicted and actual rocket-motor performance for the two Project Fire flights based upon the actual propellant weights and specific impulses:

| Performance parameter | Predicted | Actual | Percent deviation from predicted |
|--|-------------|-------------|----------------------------------|
| Average consumed weight specific impulse, newton-seconds/kg, for: Flight I | 2 706.83 | 2 708,30 | 0.05 |
| Flight II | 2 707.72 | 2 706.44 | -0.05 |
| Total impulse, newton- seconds, for: | | | |
| Flight I | 3 201 308.6 | 3 202 399.7 | 0.03 |
| Flight II | 3 179 738.4 | 3 178 293.2 | -0.04 |
| | Į. | | |

Separation and Reentry Phase

Following burnout of the Antares II-A5, separation of the reentry package from the spent Antares motor and adapter was indicated by telemetry as having occurred at a flight elapsed time of 1610.43 seconds. The spin rate at this time was determined by telemetry-signal-strength measurements to be 171 revolutions per minute, an increase of 12.4 revolutions per minute over that prior to ignition. The separation process was apparently very smooth and clean, since a coning half-angle of less than 10 was determined from onboard rate gyro data and preflight reentry-package inertias.

Six seconds after separation of the reentry package, at a flight elapsed time of 1616.43 seconds, the two small separation rockets fired. Since the event could not be monitored directly by a discrete signal, the firing of the separation rockets was established from a montage of streak camera photographs shown in figure 10. Continued separation between the spent reentry stage and the reentry package resulting from the combination of the separation rocket's performance and the drag plate can be observed from the photographs of figure 11. Separation distances between the two objects were estimated by using the photographs in conjunction with TPQ-18 radar data. These estimated distances are necessarily assumed to lie along the flight path. The Target Tracking Radar (TTR) system, which has the capability of multiple target tracking, also yielded separation distance data.

Figure 12 presents a comparison between preflight calculated separation distances and those determined from the film and TTR data. The preflight calculations showed that separation distance was sensitive to roll position at separation-rocket ignition, therefore, the preflight calculations are presented as a band bounded by a maximum and a minimum.

The estimates based on the film and the TTR data tend to confirm each other, and their deviation from the preflight prediction is not unreasonable considering uncertainties which exist in aerodynamic characteristics of the spent reentry stage and separation-rocket performance data which were used in the preflight analysis. On the basis of the preceding data it can be concluded that reorientation of the original separation rocket together with the additional separation rocket and the 90° annulus drag plate combined to increase the separation distance between the reentry package and the spent reentry stage over that experienced on the first flight. The degree of effectiveness of each cannot be determined.

Telemetry blackout occurred at a flight elapsed time of 1624.7 seconds while C-band radar blackout occurred at 1629.0 seconds. The experimental data were recorded on a continuous tape during telemetry blackout and were replayed by way of telemetry after emergence from blackout. A sample of the telemetry record obtained after emergence from blackout is shown in figure 13. As shown in this figure, the data are relatively free of noise. The pitch and yaw rate gyro traces indicate that the reentry package received two disturbances during the experimental period. The first disturbance occurred at 1640.35 seconds when the first beryllium calorimeter was melting, and the resulting body motions lasted until ejection of the second phenolic heat shield at 1648.14 seconds, at which time the motions increased and continued throughout the remainder of the experimental period. The rate gyro data along with reentry-package preflight inertias were used to calculate the angle-of-attack variations during the two phases of body motions. These calculations indicated that the angle of attack varied between 0° and 6.5° subsequent to the first disturbance and increased to a variation of 3.5° to 11° following the second disturbance.

The C-band beacon was acquired subsequent to blackout and track was maintained almost to the horizon. The impact time provided by the Eastern Test Range was 1934.3 seconds.

A comparison of actual times for the flight events with those that were expected is presented in table IV. The table includes the major space vehicle events from launch to impact. All events occurred within allowable limits of their expected times.

REENTRY TRAJECTORY

The reentry trajectory was established by utilizing several sources of flight data, since no single data source completely covered the reentry phase of flight. The individual data sources used and the method employed to define the reentry trajectory are described in the following paragraphs.

Sources of Data

The primary research data were gathered by the reentry-package onboard instrumentation and were telemetered to the ground stations. A vast amount of electronic and optical equipment was necessary to insure receipt of the data, tracking of the reentry package, and establishing of the occurrence of events. A résumé of the most useful sources and the data acquired from each source is given in the following paragraphs. The geographical locations are shown on a map of Ascension Island in figure 14.

Radar. The TPQ-18 radar on Ascension Island maintained valid beacon track from 1247 seconds to blackout which occurred at 1629 seconds. Reacquisition was accomplished at 1724 seconds and valid track was maintained until final loss of signal at 1833 seconds.

The FPS-16 radar also obtained data as it tracked the beacon during the following three periods: 1212 seconds to 1395 seconds, 1425 seconds to 1610 seconds, and 1655 seconds to 1835 seconds. During blackout, a short period of skin track from 1636 seconds to 1652 seconds was also obtained. It was determined however that this skin-track data represented the spent reentry stage.

Data were obtained by the TTR during the periods 1497 seconds to 1500 seconds, 1585 seconds to 1630 seconds, and 1670 seconds to 1790 seconds.

Optics.- Viewing conditions for the optical equipment in the reentry area were essentially perfect, with complete darkness and a cloudless sky from horizon to horizon during the reentry period. Photographs of the reentry package against the star background were obtained by ballistic cameras located near the TTR site and near the telemetry-receiver (TLM-18) site. These photographs provided position information for the time period between 1616 seconds to 1648 seconds. The Intermediate Focal Length Optical Tracker (IFLOT) provided 117 frames of 70-mm black and white film from which separation distances between the reentry package and the spent reentry stage were estimated.

Atmospheric soundings.- In order that the properties of the atmosphere through which the reentry took place might be determined, Nike-Apache sounding rockets carrying pitot static tube payloads were launched from Ascension Island by Goddard Space Flight Center 3 and 15 hours after impact of the reentry package. Figure 15 shows a comparison between the results of the atmospheric soundings and the U.S. Standard Atmosphere (ref. 3).

Derivation of Reentry Trajectory

The reentry package was not continuously tracked by any one facility during the experimental period, but data obtained from all sources, radar and optical, were sufficient for a good definition of the reentry trajectory. The complete trajectory was derived by

computer simulation utilizing radar data prior to blackout as initial conditions. Selection of the initial conditions was based on comparisons of data from the various radar sources.

Selection of initial conditions.- Comparisons of the trajectory parameters as obtained from the Ascension Island TPQ-18, FPS-16, TTR, and ballistic cameras are shown in figure 16. Figure 16(a) shows that the reentry ground tracks from these sources compare closely. As shown in figure 16(b), the variation of velocity and flight-path angle with time obtained from the TPQ-18 and FPS-16 compare favorably. The TTR velocity and flight-path angle data are scattered; however, this scatter might be expected since this radar was operating without the use of the radar beacon.

The initial conditions for the computer simulation of the reentry trajectory were chosen at an elapsed time of 1608 seconds, which was the latest time for which velocity and flight-path-angle data were considered to be sufficiently smooth. The initial conditions were chosen from the TPQ-18 data. The initial altitude, velocity, flight-path angle, and flight-path azimuth were 150 578 m, 11 326.6 m/sec, -15.30°, and 122.987°, respectively. These conditions were utilized in a three-degree-of-freedom particle-trajectory program rather than a six-degree-of-freedom program because the body attitude excursions were not considered large enough to affect the trajectory materially. The atmosphere model for the simulation used the results of the atmospheric soundings obtained at Ascension Island subsequent to the flight and the U.S. Standard Atmosphere, 1962 (ref. 3) was used in regions not covered by the soundings.

Presentation of reentry-trajectory parameters.— The results of the computer simulation of the reentry trajectory are compared with radar flight data in figure 17. In the areas where they can be compared, the computed reentry-trajectory parameters show good agreement with the flight data. The FPS-16 skin-track data from 1636 seconds to 1652 seconds are assumed to represent the spent reentry stage. This assumption is based on the photographs of figure 11 from which it can be seen that the spent reentry stage presented a much larger target to the radar. As can be seen from figure 17, the computed reentry trajectory merges smoothly with the radar-beacon-track data prior and subsequent to the blackout period. The impact points agree within 500 m. The computer simulation, therefore, is considered to be an accurate interpolation of the reentry trajectory during blackout.

The results of the simulation of the Project Fire reentry trajectory are presented in table V for 0.5-second increments, beginning at the elapsed time of 1617.75 seconds. The trajectory and environmental parameters presented are:

Geodetic latitude (negative south of the equator)

Longitude (negative west of Greenwich)

Altitude

1111111

Earth relative velocity

Flight-path angle relative to the local geodetic horizon (negative below the horizon)

Flight-path heading measured clockwise from true north

Acceleration (negative slowing down)

Dynamic pressure

Mach number

Reynolds number

Atmospheric pressure, temperature, and density

CONCLUDING REMARKS

The overall system performance of the second Project Fire space vehicle resulted in successful injection of the reentry package into the prescribed reentry trajectory. The vehicle performance was nominal and the sequence of events occurred as planned.

Sufficient data were obtained to permit an accurate definition of the reentry trajectory and to document the atmospheric environment in which the experiment was conducted.

Langley Research Center,

National Aeronautics and Space Administration, Langley Station, Hampton, Va., April 28, 1966.

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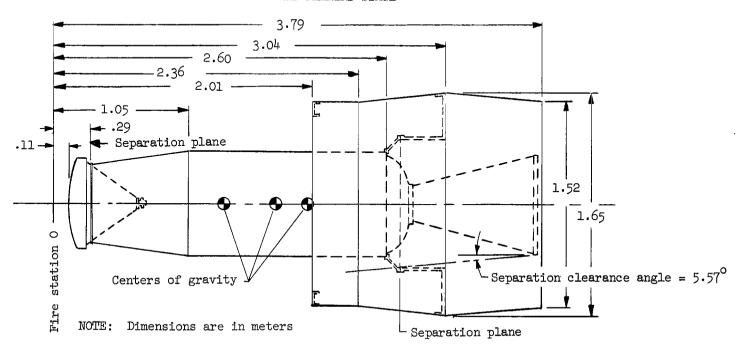
- Scallion, William I.; and Lewis, John H., Jr.: Flight Parameters and Vehicle Performance for Project Fire Flight 1 Launched April 14, 1964. NASA TN D-2996, 1965.
- 2. Convair Division of General Dynamics Test Evaluation Group: Project Fire Integrated Post Flight Evaluation Report Flight No. II. Rept. No. GDC/BKF65-042 (NASA CR 66000), Gen. Dyn./Convair, Sept. 24, 1965.
- 3. Anon.: U.S. Standard Atmosphere, 1962. NASA, U.S. Air Force, and U.S. Weather Bur., Dec. 1962.

TABLE I.- FINAL SPACECRAFT MASS, INCLUDING VELOCITY-PACKAGE ADAPTER, FOR PROJECT FIRE FLIGHT II

| | Mass, |
|--|-------------------------------|
| | kg |
| Spacecraft mass at lift-off | 2004.88 |
| Less aerodynamic shroud | -133.66 1871.22 |
| Less velocity-package adapter and clamp | -108.53 1762.69 |
| Less velocity-package shell and dynamic balance mass | - 358.04 |
| Mass at ignition of Antares II-A5 | 1404.65 |
| | -1174.35 |
| Mass at burnout | 230.30 |
| Less motor adapter and balance mass | -13.05 217.25 |
| Less inert motor | -95.44 121.81 |
| Less reentry-package adapter and balance mass | <u>-27.08</u> <u>94.73</u> |
| Less drag plate | 8.16 |
| Mass of reentry package at reentry | 86.57 |

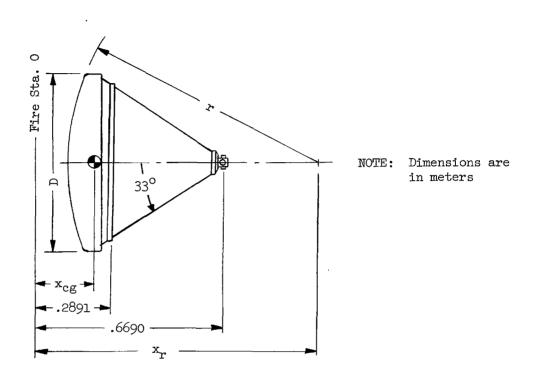
TABLE II.- PHYSICAL CHARACTERISTICS OF VELOCITY PACKAGE

AND REENTRY STAGE



| Configuration | Mass, | Center of gravity Fire Station, | Mome | nt of iner kg-m ² | tia, |
|---|---------|---------------------------------|--------|---------------------------------|---------|
| | | m m | Roll | Pitch | Yaw |
| Velocity package coast configuration | 1762.69 | 1.97 | 263.52 | 1282.36 | 1282.07 |
| Reentry stage at ignition (velocity package shell jettisoned) | 1404.65 | 1.72 | 94.45 | 707.17 | 707.68 |
| Reentry stage at burnout | 230.30 | 1.33 | 15.81 | 321.28 | 321.80 |

TABLE III - PHYSICAL CHARACTERISTICS OF THE REENTRY PACKAGE



| Configuration | Mass, | x _{cg} , | Momen | nt of in kg-m ² | ertia, | D, | r, m | x _r , |
|---|--|---------------------------------------|----------------|--|--|---------------------------------------|---------|--|
| | | m | Roll | Pitch | Yaw | | | |
| Complete reentry package Less first calorimeter Less first phenolic layer Less second calorimeter Less second phenolic layer Less third calorimeter | 86.568 83.189 76.022 72.166 66.179 64.138 | 0.277 .282 .293 .299 .309 | 2.806 2.562 | 2.806 2.644 2.305 2.128 1.857 1.776 | 2.874 2.698 2.359 2.183 1.925 1.844 | 0.672 .651 .630 .607 .587 | .929 | 1.048 1.048 .937 .937 .852 .852 |

TABLE IV.- SEQUENCE OF EVENTS FOR PROJECT FIRE FLIGHT II

| Event | Time | , sec |
|---|--|--|
| (inflight sequences) | Expected | Actual |
| Enable velocity-package ignition interlock (signal transmission) | 126.5 | 126.75 |
| Atlas booster engine cutoff (signal transmission) | 134.67 | 133.75 |
| Atlas sustainer engine cutoff (signal transmission) | 285.86 | 285.65 |
| Start velocity-package timer (signal transmission) | 294.83 | 294.386 |
| Jettison velocity-package shroud (signal transmission) | 295.5 | 295.284 |
| Atlas vernier engine cutoff (signal transmission) | 302.87 | 304.59 |
| Uncage velocity-package gyros Separate spacecraft (onboard programmer) | 302.87 308.86 | 304.59 308.73 |
| Start velocity-package pitch program End velocity-package pitch program Start reentry-package separation timers Fire spin rockets Ignite Antares II-A5 delay squib Separate velocity-package shell Ignite Antares II-A5 Burnout of Antares II-A5 (main thrust termination) Separate reentry package Arrival at altitude of 121 920 meters | 335.33 435.5 1538.63 1545.63 1545.63 1551.63 1583.60 1611.63 1617.16 | 334.87 435.03 1538.0 1545.0 1545.0 1548.0 1551.34 1583.0 |
| (400 000 feet) Ignite separation rockets Begin telemetry blackout Begin C-band radar blackout Start reentry timer (10.4g deceleration) Eject first heat shield (signal) Eject second heat shield (signal) End telemetry blackout Disable record and erase head Activate failover switch Reentry-package impact | 1617.63 1638. 5 6 1641.56 1646.56 1661.21 1696.21 1931.9 | 1616.43 1624.7 1629.0 1639.11 1642.12 1647.53 1655.1 1661.48 1696.11 1934.3 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS OBTAINED FROM COMPUTER SIMULATION

Note: The negative and positive numbers following "E" in the columns indicate a power of 10.

For example, $-0.73702098E\ 01$ is $-0.73702098 \times 10^{1}$ or -7.3702098.

TABLE V.- REENTRY TRAJECTORY PARAMETERS

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, deg Dynamic | Altitude m Atmospheric | Earth relative velocity, m/sec Atmospheric | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|-----------------------------|---|--|---|--|---|---|
| from entry point, sec | pressure, N/m ² Reynolds | /m ² pressure, N/m ² Accelerations | pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ | |
| | number | Mach number | g units | Temperature OK | | |
| 1617-75 0-00 | -0.73702098E 01 0.12005373E 01 0.59997299E 01 | -0.16946372E 02 0.25073743E-01 0.41630659E 02 | 0.12192046E 06 0.21349686E-02 -0.75280348E-03 | 0.11350339E 05 0.44589749E-04 0.38534848E 03 | -0.14737089E 02 0.18637522E-07 | 0.12286746E 03 0.36162751E-10 |
| 1618.25 0.50 | -0.73966393E 01 0.14644334E 01 0.77143757E 01 | -0.16905391E 02 0.30585329E-01 0.41635032E 02 | 0.12047784E 06 0.24154681E-02 -0.91828102E-03 | 0.11351531E 05 0.50448102E-04 0.35843811E 03 | -0.14708113E 02 0.22729554E-07 | 0.12286110E 03 0.44102600E-10 |
| 1618.75 1.00 | -0.74230770E 01 0.17627762E 01 0.96388556E 01 | -0.16864386E 02 0.36816347E-01 0.41639398E 02 | 0.11903796E 06 0.27563682E-02 -0.11053585E-02 | 0.11352721E 05 0.57567949E-04 0.34077411E 03 | -0.14679127E 02 0.27354413E-07 | 0.12285472E 03 0.53076305E-10 |
| 1619.25 1.50 | -0.74495222E 01 0.21096643E 01 0.11877517E 02 | -0.16823353E 02 0.44061257E-01 0.41643752E 02 | 0.11760091E 06 0.31630725E-02 -0.13228766E-02 | 0.11353908E 05 0.66062144E-04 0.32768486E 03 | -0.14650131E 02 0.32730509E~07 | 0.12284832E 03 0.63507651E-10 |
| 1619.75 2.00 | -0.74759748E 01 0.25439661E 01 0.14771398E 02 | -0.16782297E 02 0.53131838E-01 0.41648095E 02 | 0.11616637E 06 0.36509418E-02 -0.15952079E-02 | 0.11355092E 05 0.76251507E-04 0.31453692E 03 | -0.14621123E 02 , 0.39460279E~07 | 0.12284190E 03 0.76565554E-10 |
| 1620.25 2.50 | -0.75024349E 01 0.30928614E 01 0.18554897E 02 | -0.16741217E 02 0.64595755E-01 0.41652426E 02 | 0.11473472E 06 0.42406438E-02 -0.19393957E-02 | 0.11356273E 05 0.88567689E-04 0.30132910E 03 | -0.14592104E 02 0.47964394E-07 | 0.12283545E 03 0.93066256E-10 |
| 1620.75 3.00 | -0.75289028E 01 0.37943630E 01 0.23567473E 02 | -0.16700113E 02 0.79246920E-01 0.41656743E 02 | 0.11330521E 06 0.49599858E-02 -0.23792761E-02 | 0.11357450E 05 0.10359146E-03 0.28805084E 03 | -0.14563074E 02 0.58831150E-07 | 0.12282898E 03 0.1T415124E-09 |
| 1621.25 3.50 | -0.75553775E 01 0.47007914E 01 0.30297199E 02 | -0.16658985E 02 0.98178071E-01 0.41661046E 02 | 0.11187874E 06 : 0.58452138E-02 -0.29476570E-02 | 0.11358623E 05 0.12207983E-03 0.27470990E 03 | -0.14534033E 02 0.72870162E-07 | 0.12282249E 03 0.14139141E-09 |
| 1621-75 4-00 | -0.75818600E 01 0.58873355E 01 0.39474363E 02 | -0.16617833E 02 0.12295956E 00 0.41665330E 02 | 0.11045495E 06 0.69461946E-02 -0.36916861E-02 | 0.11359791E 05 0.14507429E-03 0.26130054E 03 | -0.14504980E 02 0.91244824E-07 | 0.12281598E 03 0.17704413E-09 |
| 1622.25 4.50 | -0.76083495E 01 0.73131946E 01 0.50378201E 02 | -0.16576657E 02 0.15273925E 00 0.41669592E 02 | 0.10903374E 06 0.83215855E-02 -0.45857787E-02 | 0.11360953E 05 0.17379993E-03 0.25259296E 03 | -0.14475916E 02 0.11332030E-06 | 0.12280944E 03 0.21987761E-09 |
| 1622.75 5.00 | -0.76348469E 01 0.90591587E 01 0.63729490E 02 | -0.16535454E 02 0.18920447E 00 0.41673830E 02 | 0.10761490E 06 0.10020393E-01 -0.56805952E-02 | 0.11362109E 05 0.20928026E-03 0.24607521E 03 | -0.14446841E 02 0.14034603E-06 | 0.12280288E 03 0.27231617E-09 |
| 1623.25 5.50 | -0.76613510E 01 0.11287688E 02 0.81163929E 02 | -0.16494230E 02 0.23574827E 00 0.41678039E 02 | 0.10619880E 06 0.12127508E-01 -0.70780066E-02 | 0.11363256E 05 0.25328828E-03 0.23950592E 03 | -0.14417756E 02 0.17483546E-06 | 0.12279630E 03 0.33923668E-09 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| time, sec latitude, | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|---------------------|---|--|---|--|---|---|
| | Dynamic pressure, N/m ² | Dynamic Dynamic pressure, ssure, N/m ² lb/ft ² | Atmospheric pressure, N/m ² Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ | |
| | Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | 46 / W | stug/it |
| 1623.75 6.00 | -0.76878624E 01 0.14150667E 02 0.10410045E 03 | -0.16452979E 02 0.29554283E 00 0.41682213E 02 | 0.10478582E 06 0.14756040E-01 -0.88732534E-02 | 0.11364395E 05 0.30818631E-03 0.23288798E 03 | -0.14388658E 02 0.21913637E-06 | 0.12278969E 03 0.42519460E-09 |
| 1624.25 6.50 | -0.77143810E 01 0.17858605E 02 0.13455221E 03 | -0.16411708E 02 0.37298474E 00 0.41686344E 02 | 0.10337475E 06 0.18058921E-01 -0.11198337E-01 | 0.11365521E 05 0.37716842E-03 0.22621667E 03 | -0.14359550E 02 0.27650248E-06 | 0.12278306E 03 0.53650320E-09 |
| 1624.75 7.00 | -0.77409066E 01 0.22693614E 02 0.17530151E 03 | -0.16370409E 02 0.47396600E 00 0.41690420E 02 | 0.10196680E 06 0.22233783E-01 -0.14230155E-01 | 0.11366632E 05 0.46436222E-03 0.21950043E 03 | -0.14330432E 02 0.35129358E-06 | 0.12277641E 03 0.68162185E-09 |
| 1625.25 7.50 | -0.77674392E 01 0.29050933E 02 0.23034876E 03 | -0.16329090E 02 0.60674137E 00 0.41694426E 02 | 0.10056160E 06 0.27550002E-01 -0.18216547E-01 | 0.11367724E 05 0.57539377E-03 0.21274094E 03 | -0.14301302E 02 0.44961747E-06 | 0.12276974E 03 0.87240162E-09 |
| 1625.75 8.00 | -0.77939785E 01 0.37161156E 02 0.30075444E 03 | -0.16287744E 02 0.77612689E 00 0.41698345E 02 | 0.99158831E 05 0.34354536E-01 -0.23302107E-01 | 0.11368793E 05 0.71750943E-03 0.20761856E 03 | -0.14272162E 02 0.57503022E-06 | 0.12276304E 03 0.11157424E-08 |
| 1626.25 8.50 | -0.78205251E 01 0.47511703E 02 0.39095814E 03 | -0.16246373E 02 0.99230257E 00 0.41702153E 02 | 0.97758732E 05 0.43029055E-01 -0.29792474E-01 | 0.11369831E 05 0.89868053E-03 0.20357977E 03 | -0.14243011E 02 0.73505991E-06 | 0.12275632E 0: 0.14262512E-08 |
| 1626.75 9.00 | -0.78470780E 01 0.67387738E 02 0.56428576E 03 | -0.16204982E 02 0.14074222E 01 0.40999310E 02 | 0.96361453E 05 0.56470036E-01 -0.42255851E-01 | 0.11370822E 05 0.11794012E-02 0.19943544E 03 | -0.14213850E 02 0.10423830E-05 | 0.12274958E 0: 0.20225563E-0 |
| 1627.25 9.50 | -0.78736377E 01 0.97795321E 02 0.83298029E 03 | -0.16163567E 02 0.20424978E 01 0.40737337E 02 | 0.94966611E 05 0.71158664E-01 -0.61323093E-01 | 0.11371733E 05 0.14861796E-02 0.19549924E 03 | -0.14184679E 02 0.15124984E-05 | 0.12274281E 0: 0.29347304E-0 |
| 1627.75 10.00 | -0.79002033E 01 0.13635046E 03 0.11737298E 04 | -0.16122125E 02 0.28477387E 01 0.40809897E 02 | 0.93574971E 05 0.94457705E-01 -0.85499305E-01 | 0.11372537E 05 0.19727902E-02 0.19309945E 03 | -0.14155499E 02 0.21084924E-05 | 0.12273602E 0 0.40911493E-0 |
| 1628.25 10.50 | -0.79267750E 01 0.18232598E 03 0.15602694E 04 | -0.16080666E 02 0.38079573E 01 0.40731613E 02 | 0.92185692E 05 0.11896256E 00 -0.11432851E 00 | 0.11373209E 05 0.24845848E-02 0.19440987E 03 | -0.14126311E 02 0.28191139E-05 | 0.12272921E 0 0.54699822E-0 |
| 1628.75 11.00 | -0.79533524E 01 0.23791690E 03 0.20021731E 04 | -0.16039179E 02 0.49689979E 01 0.40271549E 02 | 0.90799081E 05 0.20933814E 00 -0.14918710E 00 | 0.11373729E 05 0.43721180E-02 0.19822329E 03 | -0.14097115E 02 0.36783219E-05 | 0.12272238E 0: 0.71371204E-0 |
| 1629.25 11.50 | -0.79799349E 01 0.28618786E 03 0.23232038E 04 | -0.15997676E 02 0.59771578E 01 0.39481987E 02 | 0.89415365E 05 0.26181890E 00 -0.17945567E 00 | 0.11374081E 05 0.54682015E-02 0.20676488E 03 | -0.14067913E 02 0.44243420E-05 | 0.12271553E 0 0.85846379E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Reynolds | Longitude, deg Dynamic pressure, lb/ft ² Mach | Altitude m Atmospheric pressure, N/m ² Accelerations, g units | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|---|---|--|---|---|--|
| | number | number | | o _K | | |
| 1629.75 12.00 | -0.80065221E 01 0.35021436E 03 0.27978601E 04 | -0.15956148E 02 0.73143792E 01 0.39083537E 02 | 0.88034393E 05 0.32756446E 00 -0.21960384E 00 | 0.11374256E 05 0.68413261E-02 0.21070633E 03 | -0.14038705E 02 0.54139982E-05 | 0.12270865E 03 0.10504887E-07 |
| 1630.25 12.50 | -0.80331137E 01 0.42034475E 03 0.32704970E 04 | -0.15914600E 02 0.87790829E 01 0.38507362E 02 | 0.86656163E 05 0.40511435E 00 -0.26357948E 00 | 0.11374229E 05 0.84609893E-02 0.21744311E 03 | -0.14009493E 02 0.64981819E-05 | 0.12270174E 03 0.12608550E-07 |
| 1630.75 13.00 | -0.80597087E 01 0.52318929E 03 0.40971398E 04 | -0.15873031E 02 0.10927036E 02 0.38625786E 02 | 0.85280906E 05 0.50078459E 00 -0.32806871E 00 | 0.11373940E 05 0.10459104E-01 0.21577420E 03 | -0.13980279F 02 0.80884843E-05 | 0.12269482E 0: 0.15694245E+0 |
| 1631.25 13.50 | -0.80863068E 01 0.67436808E 03 0.54571149E 04 | -0.15831446E 02 0.14084471E 02 0.39442782E 02 | 0.83908392E 05 0.62150215E 00 -0.42286620E 00 | 0.11373260E 05 0.12980343E-01 0.20755349E 03 | -0.13951063E 02 0.10426948E-04 | 0.12268788E 0 0.20231612E-0 |
| 1631.75 14.00 | -0.81129067E 01 0.83502881E 03 0.67263069E 04 | -0.15789847E 02 0.17439940E 02 0.39316406E 02 | 0.82539001E 05 0.77298076E 00 -0.52360940E 00 | 0.11372089E 05 0.16144039E-01 0.20870579E 03 | -0.13921850E 02 0.12913713E-04 | 0.12268091E 0 0.25056732E-0 |
| 1632.25 14.50 | -0.81395073E 01 0.10234823E 04 0.81517063E 04 | -0.15748227E 02 0.21375873E 02 0.38979214E 02 | 0.81172354E 05 0.96168739E 00 -0.64178019E 00 | 0.11370383E 05 0.20085259E-01 0.21155471E 03 | -0.13892642E 02 0.15832895E-04 | 0.12267392E 0 0.30720877E-0 |
| 1632.75 15.00 | -0.81661072E 01 0.12716553E 04 0.10154879E 05 | -0.15706600E 02 0.26559075E 02 0.39040154E 02 | 0.79808831E 05 0.11913939E 01 -0.79739846E 00 | 0.11368027E 05 0.24882779E-01 0.21095063E 03 | -0.13863443E 02 0.19680194E-04 | 0.12266691E 0 0.38185868E-0 |
| 1633.25 15.50 | -0.81927043E 01 0.16185560E 04 0.13205214E 05 | -0.15664960E 02 0.33804245E 02 0.39525444E 02 | 0.78448509E 05 0.14799041E 01 -0.10149244E 01 | 0.11364757E 05 0.30908440E-01 0.20574335E 03 | -0.13834258E 02 0.25063260E-04 | 0.12265987E 0 0.48630737E-0 |
| 1633.75 16.00 | -0.82192960E 01 0.21027505E 04 0.17728436E 05 | -0.15623313E 02 0.43916857E 02 0.40157951E 02 | 0.77091615E 05 0.16576105E 01 -0.13185412E 01 | 0.11360215E 05 0.38797003E-01 0.19806903E 03 | -0.13805095E 02 0.32587031E-04 | 0.12265282E (0.63229257E-(|
| 1634.25 16.50 | -0.82458788E 01 0.27488145E 04 0.23859119E 05 | -0.15581669E 02 0.57410186E 02 0.40919975E 02 | 0.75737923E 05 0.23468147E 01 -0.17236592E 01 | 0.11353782E 05 0.49014244E-01 0.19162379E 03 | -0-13775963E 02 0-42647592E-04 | 0.12264575E (0.82749962E-(|
| 1634.75 17.00 | -0.82724482E 01 0.34828832E 04 0.30321683E 05 | -0.15540033E 02 0.72741530E 02 0.40962879E 02 | 0.74387964E 05 0.29650798E 01 -0.21839610E 01 | 0.11345350E 05 0.61926981E-01 0.19112362E 03 | -0.13746874E 02 0.54116940E-04 | 0.12263865E (0.10500416E-(|
| 1635.25 17.50 | -0.82989987E 01 0.42297298E 04 0.35751599E 05 | -0.15498409E 02 0.88339746E 02 0.40155528E 02 | 0.73041967E 05 0.37459295E 01 -0.26522753E 01 | 0.11334614E 05 0.78235365E-01 0.19800505E 03 | -0.13717843E 02 0.65845982E-04 | 0.12263154E 0.12776225E- |

| Flight elapsed time, sec Elapsed time from entry point, sec Geodetic latitude, deg Dynamic pressure, N/m ² | | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg | |
|--|---|---|---|--|---|----------------------------------|
| | | | pressure, N/m ² pressure, | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, |
| | Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | 46 / III | slug/ft ³ |
| 1635.75 18.00 | -0.83255252E 01 0.50500181E 04 0.41226684E 05 | -0.15456810E 02 0.10547182E 03 0.39289290E 02 | 0.71700009E 05 0.46746392E 01 -0.31666416E 01 | 0.11321523E 05 0.97631873E-01 0.20651926E 03 | -0.13688885E 02 0.78797674E-04 | 0.12262442E 03 0.15289268E-06 |
| 163 6. 25 18.50 | -0.83520216E 01 0.59921165E 04 0.47425851E 05 | -0.15415241E 02 0.12514796E 03 0.38472667E 02 | 0.70362851E 05 0.57808006E 01 -0.37573895E 01 | 0.11305721E 05 0.12073453E 00 0.21459303E 03 | -0.13660015E 02 0.93759199E-04 | 0.12261728E 03 0.18192282E-06 |
| 1636.75 19-00 | -0.83784806E 01 0.71714560E 04 0.55831796E 05 | -0.15373721E 02 0.14977898E 03 0.38016566E 02 | 0.69030342E 05 0.70799871E 01 -0.44969009E 01 | 0.11286660E 05 0.14786861E 00 0.21930233E 03 | -0.13631253E 02 0.11259175E-03 | 0.12261012E 03 0.21846399E-06 |
| 1637-25 19-50 | -0.84048940E 01 0.85434788E 04 0.65435476E 05 | -0.15332258E 02 0.17843427E 03 0.37527324E 02 | 0.67703014E 05 0.86714393E 01 -0.53572353E 01 | 0.11263587E 05 0.18110678E 00 0.22419993E 03 | -0.13602623E 02 0.13468260E-03 | 0.12260296E 03 0.26132729E-06 |
| 1637.75 20.00 | -0.84312519E 01 0.10020096E 05 0.75053630E 05 | -0.15290867E 02 0.20927406E 03 0.36921257E 02 | 0.66381325E 05 0.10525253E 02 -0.62831561E 01 | 0.11236197E 05 0.21982449E 00 0.23100578E 03 | -0.13574152E 02 0.15873159E-03 | 0.12259578E 03 0.30799003E-06 |
| 1638-25 20-50 | -0.84575433E 01 0.11693456E 05 0.85871064E 05 | -0.15249565E 02 0.24422292E 03 0.36265611E 02 | 0.65066037E 05 0.12698818E 02 -0.73324460E 01 | 0.11204051E 05 0.26522034E 00 0.23747494E 03 | -0.13545869E 02 0.18630431E-03 | 0.12258860E 03 0.36148992E-06 |
| 1638-75 21-00 | -0.84837562E 01 0.13865449E 05 0.10160986E 06 | -0.15208372E 02 0.28958593E 03 0.36067739E 02 | 0.63757302E 05 0.15242757E 02 -0.86944059E 01 | 0.11166006E 05 0.31835160E 00 0.23907339E 03 | -0.13517809E 02 0.22241720E-03 | 0.12258142E 03 0.43156047E-06 |
| 1639.25 21.50 | -0.85098751E 01 0.16155286E 05 0.11699893E 06 | -0.15167316E 02 0.33741017E 03 0.35460688E 02 | 0.62456110E 05 0.18349746E 02 -0.10130261E 02 | 0.11121007E 05 0.38324242E 00 0.24377870E 03 | -0.13490015E 02 0.26125019E-03 | 0.12257423E 03 0.50690888E-06 |
| 1639.75 22.00 | -0.85358831E 01 0.18875824E 05 0.13602765E 06 | -0.15126417E 02 0.39422979E 03 0.35144914E 02 | 0.61163377E 05 0.21805868E 02 -0.11836189E 02 | 0.11068311E 05 0.45542502E 00 0.24671123E 03 | -0.13462535E 02 0.30815793E-03 | 0.12256706E 03 0.59792489E-06 |
| 1640-25 22-50 | -0.85617599E 01 0.21796175E 05 0.15567965E 06 | -0.15085709E 02 0.45522260E 03 0.34698019E 02 | 0.59879789E 05 0.25915628E 02 -0.13667411E 02 | 0.11006844E 05 0.54125916E 00 0.25117642E 03 | -0.13435423E 02 0.35981964E-03 | 0.12255989E 03 0.69816512E-06 |
| 1640.75 23.00 | -0.85874856E 01 0.24929356E 05 0.17622518E 06 | -0.15045226E 02 0.52066044E 03 0.34095517E 02 | 0.58606334E 05 0.30644519E 02 ~0.15632089E 02 | 0.10936252E 05 0.64002410E 00 0.25648067E 03 | -0.13408740E 02 0.41687342E-03 | 0.12255273E 03 0.80886770E-06 |
| 1641-25 23-50 | -0.86130363E 01 0.28451929E 05 0.19988474E 06 | -0.15005010E 02 0.59423090E 03 0.33516665E 02 | 0.57344081E 05 0.36123434E 02 ~0.17840938E 02 | 0.10855236E 05 0.75445361E 00 0.26089183E 03 | -0.13382555E 02 0.48290677E-03 | 0.12254560E 03 0.93699350E-06 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² | Longitude, deg Dynamic pressure, lb/ft ² | Altitude m Atmospheric pressure, N/m ² Accelerations, | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|--|--|---|---|---|--|
| | Reynolds number | Mach number | g units | Temperature ^O K | | |
| 1641.75 24.00 | -0.86383871E 01 0.32285362E 05 0.22586800E 06 | -0.14965088E 02 0.67429382E 03 0.32982904E 02 | 0.56094249E 05 0.42450597E 02 -0.20244714E 02 | 0.10763125E 05 0.88659918E 00 0.26509267E 03 | -0.13356938E 02 0.55738983E-03 | 0.12253849E 03 0.10815145E~05 |
| 1642.25 24.50 | -0.86635101E 01 0.36521114E 05 0.25542444E 06 | -0.14925514E 02 0.76275935E 03 0.32443378E 02 | 0.54858056E 05 0.49572581E 02 -0.22900765E 02 | 0.10658526E 05 0.10353449E 01 0.26848055E 03 | -0.13331974E 02 0.64295396E-03 | 0.12253141E 03 0.12475362E-05 |
| 1642.75 25.00 | -0.86883749E 01 0.40726562E 05 0.28348087E 06 | -0.14886336E 02 0.85059196E 03 0.31773500E 02 | 0.53636723E 05 0.57616161E 02 -0.25537815E 02 | 0.10540877E 05 0.12033386E 01 0.27393372E 03 | -0.13307753E 02 0.73308514E-03 | 0.12252438E 0: 0.14224195E-0 |
| 1643.25 25.50 | -0.87129506E 01 0.45314213E 05 0.31573236E 06 | -0.14847595E 02 0.94640705E 03 0.31167346E 02 | 0.52432229E 05 0.66728911E 02 -0.28414526E 02 | 0.10409885E 05 0.13936623E 01 0.27797059E 03 | -0.13284372E 02 0.83632053E-03 | 0.12251739E 0: 0.16227292E-0 |
| 1643.75 26.00 | -0.87372G44E 01 0.50202366E 05 0.35135008E 06 | -0.14809353E 02 0.10484982E 04 0.30520287E 02 | 0.51245338E 05 0.77027584E 02 -0.31479670E 02 | 0.10264309E 05 0.16087546E 01 0.28141264E 03 | -0.13261931E 02 0.95300446E-03 | 0.12251047E 0: 0.18491333E-0 |
| 1644•25 26•50 | -0.87611004E 01 0.55490614E 05 0.39248002E 06 | -0.14771660E 02 0.11589456E 04 0.29991628E 02 | 0.50078030E 05 0.88400722E 02 -0.34795694E 02 | 0.10103075E 05 0.18462875E 01 0.28332213E 03 | -0.13240549E 02 0.10872829E-02 | 0.12250361E 0 0.21096763E-0 |
| 1644.75 27.00 | -0.87846009E 01 0.61081120E 05 0.43831261E 06 | -0.14734579E 02 0.12757057E 04 0.29352046E 02 | 0.48931982E 05 0.10130167E 03 -0.38301252E 02 | 0.99252467E 04 0.21157295E 01 0.28452352E 03 | -0.13220348E 02 0.12400938E-02 | 0.12249682E 0 0.24061783E-0 |
| 1645-25 27-50 | -0.88076646E 01 0.66982316E 05 0.48990850E 06 | -0.14698178E 02 0.13989548E 04 0.28747663E 02 | 0.47808718E 05 0.11566452E 03 -0.42001629E 02 | 0.97291552E 04 0.24157038E 01 0.28485011E 03 | -0.13201470E 02 0.14152725E-02 | 0.12249013E 0 0.27460810E-0 |
| 1645.75 28.00 | -0.88302509E 01 0.71714704E 05 0.53918505E 06 | -0.14662517E 02 0.14977928E 04 0.28234036E 02 | 0.46710371E 05 0.13192643E 03 -0.44969099E 02 | 0.95178319E 04 0.27553408E 01 0.28280772E 03 | -0.13184062E 02 0.15832967E-02 | 0.12248353E 0 0.30721017E-0 |
| 1646-25 28-50 | -0.88523188E 01 0.80072328E 05 0.62046158E 06 | -0.14627666E 02 0.16723454E 04 0.27626289E 02 | 0.45638771E 05 0.14982287E 03 -0.50209793E 02 | 0.92845104E 04 0.31291158E 01 0.28087792E 03 | -0.13168275E 02 0.18577814E-02 | 0.12247704E 0 0.36046897E-0 |
| 1646.75 29.00 | -0.88738134E 01 0.86817792E 05 0.69786023E 06 | -0.14593706E 02 0.18132273E 04 0.27035481E 02 | 0.44596278E 05 0.16950797E 03 -0.54439573E 02 | 0.90291101E 04 0.35402477E 01 0.27774701E 03 | -0.13154321E 02 0.21298499E-02 | 0.12247067E 0 0.41325896E-0 |
| 1647.25 29.50 | -0.88946850E 01 0.93551193E 05 0.78380606E 06 | -0.14560727E 02 0.19538573E 04 0.26343901E 02 | 0.43584723E 05 0.19268425E 03 -0.58661790E 02 | 0.87528453E 04 0.40242943E 01 0.27410542E 03 | -0.13142406E 02 0.24421985E-02 | 0.12246444E 0 0.47386459E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|--|---|---|--|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² Reynolds number | Dynamic pressure, lb/ft ² Mach number | Atmospheric pressure, N/m ² Accelerations, g units | Atmospheric pressure, lb/ft ² Temperature ^O K | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| 1647.75 30.00 | -0.89148850E 01 0.10006794E 06 0.87804322E 06 | -0.14528792E 02 0.20899625E 04 0.25650606E 02 | 0.42606696E 05 0.21687529E 03 -0.62748153E 02 | 0.84564163E 04 0.45295346E 01 0.27005516E 03 | -0.13132747E 02 0.27986747E-02 | 0.12245836E 03 0.54303235E-05 |
| 1648.25 30.50 | -0.89343656E 01 0.10706991E 06 0.99555159E 06 | -0.14497992E 02 0.22362016E 04 0.25039591E 02 | 0.41664103E 05 0.24381185E 03 -0.67138774E 02 | 0.81392809E 04 0.50921165E 01 0.26341204E 03 | -0.13125585E 02 0.32324032E-02 | 0.12245244E 03 0.62718954E-05 |
| 1648.75 31.00 | -0.89530780E 01 0.11243956E 06 0.11048850E 07 | -0.14468393E 02 0.23483491E 04 0.24169039E 02 | 0.40758846E 05 0.27483704E 03 -0.70505842E 02 | 0.78025391E 04 0.57400910E 01 0.25914629E 03 | -0.13121185E 02 0.36938341E-02 | 0.12244670E 03 0.71672189E-05 |
| 1649.25 31.50 | -0.89709822E 01 0.11606730E 06 0.12046631E 07 | -0.14440068E 02 0.24241161E 04 0.23231823E 02 | 0.39893291E 05 0.30760978E 03 -0.72780641E 02 | 0.74516960E 04 0.64245639E 01 0.25634399E 03 | -0.13119816E 02 0.41805151E-02 | 0.12244114E 03 0.81115356E-05 |
| 1649.75 32.00 | -0.89880518E 01 0.11841495E 06 0.13015062E 07 | -0.14413058E 02 0.24731477E 04 0.22195795E 02 | 0.39067740E 05 0.34334407E 03 -0.74252745E 02 | 0.70922589E 04 0.71708903E 01 0.25384422E 03 | -0.13121729E 02 0.47083370E-02 | 0.12243578E 03 0.91356790E-05 |
| 1650-25 32-50 | -0.90042707E 01 0.11851709E 06 0.13747383E 07 | -0.14387383E 02 0.24752809E 04 0.21088189E 02 | 0.38283413E 05 0.38084758E 03 -0.74316791E 02 | 0.67284304E 04 0.79541674E 01 0.25345989E 03 | -0.13127169E 02 0.52358066E-02 | 0.12243062E 03 0.10159138E-04 |
| 1650.75 33.00 | -0.90196372E 01 0.11693076E 06 0.14312782E 07 | -0.14363Q54E 02 0.24421498E 04 0.19935022E 02 | 0.37539549E 05 0.41994548E 03 -0.73322076E 02 | 0.63674172E 04 0.87707438E 01 0.25389204E 03 | -0.13136359E 02 0.57680939E-02 | 0.12242566E 03 0.11191946E-04 |
| 1651.25 33.50 | -0.90341617E 01 0.11491824E 06 0.14939150E 07 | -0.14340054E 02 0.24001173E 04 0.18856883E 02 | 0.36835918E 05 0.46154123E 03 -0.72060111E 02 | 0.60117375E 04 0.96394892E 01 0.25303605E 03 | -0.13149504E 02 0.63594430E-02 | 0.12242090E 03 0.12339352E-04 |
| 1651.75 34.00 | -0.90478588E 01 0.11177587E 06 0.15454703E 07 | -0.14318358E 02 0.23344876E 04 0.17791337E 02 | 0.36171530E 05 0.50465494E 03 -0.70089671E 02 | 0.56642503E 04 0.10539938E 02 0.25237164E 03 | -0.13166816E 02 0.69677623E-02 | 0.12241633E 03 0.13519686E-04 |
| 1652-25 34-50 | -0.90607516E 01 0.10806652E 06 0.15951299E 07 | -0.14297932E 02 0.22570163E 04 0.16779250E 02 | 0.35545395E 05 0.54864946E 03 -0.67763706E 02 | 0.53272513E 04 0.11458783E 02 0.25110909E 03 | -0.13188506E 02 0.76157901E-02 | 0.12241196E 03 0.14777067E-04 |
| 1652•75 35•00 | -0.90728656E 01 0.10415075E 06 0.16500506E 07 | -0.14278736E 02 0.21752337E 04 0.15824833E 02 | 0.34955531E 05 0.59423637E 03 -0.65308300E 02 | 0.50018461E 04 0.12410885E 02 0.24871349E 03 | -0.13214797E 02 0.83259137E-02 | 0.12240777E 03 0.16154934E-04 |
| 1653.25 35.50 | -0.90842292E 01 0.99697926E 05 0.16974035E 07 | -0.14260728E 02 0.20822345E 04 0.14908676E 02 | 0.34401328E 05 0.64111021E 03 -0.62516132E 02 | 0.46893353E 04 0.13389866E 02 0.24642527E 03 | -0.13245924E 02 0.90676283E-02 | 0.12240377E 03 0.17594097E-04 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Reynolds number | Longitude, deg Dynamic pressure, lb/ft ² Mach number | Altitude m Atmospheric pressure, N/m ² Accelerations, g units | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature OK | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|--|---|---|--|---|--|
| 1653.75 36.00 | -0.90948750E 01 0.95362483E 05 0.17455042E 07 | -0.14243850E 02 0.19916869E 04 0.14013167E 02 | 0.33880653E 05 0.68552173E 03 -0.59797569E 02 | 0.43911563E 04 0.14317419E 02 0.24439451E 03 | -0.13282134E 02 0.98912211E-02 | 0.12239993E 03 0.19192131E-04 |
| 1654.25 36.50 | -0.91048328E 01 0.91788985E 05 0.18081489E 07 | -0.14228062E 02 0.19170529E 04 0.13136845E 02 | 0.33391983E 05 0.72592345E 03 -0.57556787E 02 | 0.41037583E 04 0.15161227E 02 0.24266573E 03 | -0.13323718E 02 0.10900770E-01 | 0.12239627E 03 0.21150978E-04 |
| 1654.75 37.00 | -0.91141307E 01 0.86248440E 05 0.18247919E 07 | -0.14213319E 02 0.18013362E 04 0.12288464E 02 | 0.32934250E 05 0.77809632E 03 -0.54082558E 02 | 0.38310023E 04 0.16250880E 02 0.24187731E 03 | -0.13371023E 02 0.11753212E-01 | 0.12239276E 03 0.22804989E-04 |
| 1655.25 37.50 | -0.91228076E 01 0.80259937E 05 0.18236715E 07 | -0.14199557E 02 0.16762637E 04 0.11492522E 02 | 0.32505320E 05 0.82698615E 03 -0.50327434E 02 | 0.35760847E 04 0.17271965E 02 0.24113850E 03 | -0.13424326E 02 0.12552013E-01 | 0.12238940E 03 0.24354918E-04 |
| 1655.75 38.00 | -0.91309067E 01 0.74533284E 05 0.18193412E 07 | -0.14186709E 02 0.15566600E 04 0.10755850E 02 | 0.32103441E 05 0.87772295E 03 -0.46736505E 02 | 0.33395876E 04 0.18331625E 02 0.24018519E 03 | -0.13483875E 02 0.13365793E-01 | 0.12238618E 03 0.25933912E-04 |
| 1656.25 38.50 | -0.91384697E 01 0.69058948E 05 0.18113269E 07 | -0.14174712E 02 0.14423262E 04 0.10072704E 02 | 0.31725946E 05 0.92981315E 03 -0.43303792E 02 | 0.31199675E 04 0.19419552E 02 0.23905506E 03 | -0.13549922E 02 0.14188940E-01 | 0.12238309E 0 0.27531080E-0 |
| 1656.75 39.00 | -0.91455352E 01 0.63658328E 05 0.17922762E 07 | -0.14163500E 02 0.13295318E 04 0.94391372E 01 | 0.31371616E 05 0.97870688E 03 -0.39917304E 02 | 0.29171182E 04 0.20440719E 02 0.23799428E 03 | -0.13622725E 02 0.14961576E-01 | 0.12238012E 0 0.29030240E-0 |
| 1657.25 39.50 | -0.91521428E 01 0.58850747E 05 0.17765302E 07 | -0.14153016E 02 0.12291234E 04 0.88541925E 01 | 0.31038470E 05 0.10261283E 04 -0.36902684E 02 | 0.27303659E 04 0.21431136E 02 0.23696553E 03 | -0.13702525E 02 0.15788483E-01 | 0.12237727E 0: 0.30634705E-0 |
| 1657.75 40.00 | -0.91583254E 01 0.55788745E 05 0.18066644E 07 | -0.14143204E 02 0.11651722E 04 0.83055115E 01 | 0.30724449E 05 0.10783699E 04 -0.34982638E 02 | 0.25551380E 04 0.22522225E 02 0.23583225E 03 | -0.13789616E 02 0.17090234E-01 | 0.12237451E 0 0.33160518E-0 |
| 1658.25 40.50 | -0.91641070E 01 0.52310079E 05 0.18177645E 07 | -0.14134028E 02 0.10925187E 04 0.77861523E 01 | 0.30429022E 05 0.11275184E 04 -0.32801322E 02 | 0.23900411E 04 0.23548712E 02 0.23476608E 03 | -0.13884455E 02 0.18314909E-01 | 0.12237185E 0 0.35536779E-0 |
| 1658.75 41.00 | -0.91695130E 01 0.48669478E 05 0.18141799E 07 | -0.14125446E 02 0.10164832E 04 0.72994964E 01 | 0.30150435E 05 0.11738652E 04 -0.30518463E 02 | 0.22359544E 04 0.24516685E 02 0.23376068E 03 | -0.13987480E 02 0.19469775E-01 | 0.12236927E 0 0.37777588E-0 |
| 1659.25 41.50 | -0.91745688E 01 0.45029468E 05 0.17990358E 07 | -0.14117417E 02 0.94046002E 03 0.68466807E 01 | 0.29888307E 05 0.12174739E 04 -0.28235975E 02 | 0.20930994E 04 0.25427471E 02 0.23281468E 03 | -0.14099106E 02 0.20556411E-01 | 0.12236678E 0 0.39886008E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry | Geodetic latitude, deg Dynamic pressure, N/m ² | Longitude, deg Dynamic pressure, | Altitude m Atmospheric pressure, N/m ² | Earth relative velocity, m/sec Atmospheric pressure, | Earth relative flight-path angle, deg Atmospheric density. | Earth relative heading angle, deg |
|---|---|---|--|--|---|---|
| point, sec | Reynolds number | lb/ft ² Mach number | Accelerations, g units | lb/ft ² Temperature ^O K | kg/m ³ | density, slug/ft ³ |
| 1659.75 42.00 | -0.91793029E 01 0.40485467E 05 0.17302582E 07 | -0.14109900E 02 0.84555658E 03 0.64329545E 01 | 0.29640276E 05 0.12666565E 04 -0.25386635E 02 | 0.19628928E 04 0.26454671E 02 0.23191947E 03 | -0.14219671E 02 0.21015327E-01 | 0.12236437E 03 0.40776453E-04 |
| 1660-25 42-50 | -0.91837461E 01 0.36472882E 05 0.16625402E 07 | -0.14102845E 02 0.76175200E 03 0.60605209E 01 | 0.29405504E 05 0.13137932E 04 -0.22870521E 02 | 0.18459259E 04 0.27439142E 02 0.23107220E 03 | -0.14349322E 02 0.21407785E-01 | 0.12236202E 03 0.41537945E-04 |
| 1660.75 43.00 | -0.91879274E 01 0.32989505E 05 0.15994633E 07 | -0.14096206E 02 0.68900017E 03 0.57240907E 01 | 0.29182390E 05 0.13585891E 04 -0.20686251E 02 | 0.17404700E 04 0.28374725E 02 0.23026700E 03 | -0.14488139E 02 0.21780753E-01 | 0.12235973E 03 0.42261623E-04 |
| 1661-25 43-50 | -0.91918718E 01 0.29951768E 05 0.15406673E 07 | -0.14089939E 02 0.62555570E 03 0.54190692E 01 | 0.28969716E 05 0.14012891E 04 -0.18781421E 02 | 0.16450310E 04 0.29266532E 02 0.22949947E 03 | -0.14636199E 02 0.22136270E-01 | 0.12235750E 03 0.42951439E-04 |
| 1661.75 44.00 | -0.91956016E 01 0.27291107E 05 0.14858129E 07 | -0.14084017E 02 0.56998663E 03 0.51415730E 01 | 0.28766414E 05 0.14421073E 04 -0.17113038E 02 | 0.15583499E 04 0.30119037E 02 0.22876577E 03 | -0.14793576E 02 0.22476119E-01 | 0.12235531E 03 0.43610856E-04 |
| 1662.25 44.50 | -0.91991358E 01 0.25139658E 05 0.14455329E 07 | -0.14078403E 02 0.52505269E 03 0.48879203E 01 | 0.28571495E 05 0.14845731E 04 -0.15763961E 02 | 0.14792579E 04 0.31005954E 02 0.22806234E 03 | -0.14960338E 02 0.22977446E-01 | 0.12235316E 03 0.44583589E-04 |
| 1662.75 45.00 | -0.92024899E 01 0.23424048E 05 0.14206545E 07 | -0.14073072E 02 0.48922142E 03 0.46520989E 01 | 0.28384347E 05 0.15299686E 04 -0.14688178E 02 | 0.14058875E 04 0.31954059E 02 0.22738694E 03 | -0.15136629E 02 0.23702325E-01 | 0.12235105E 03 0.45990088E-04 |
| 1663.25 45.50 | -0.92056768E 01 0.21828978E 05 0.13947799E 07 | -0.14068011E 02 0.45590769E 03 0.44322904E 01 | 0.28204135E 05 0.15736821E 04 -0.13687980E 02 | 0.13376232E 04 0.32867035E 02 0.22673656E 03 | -0.15322672E 02 0.24400346E-01 | 0.12234898E 03 0.47344472E-04 |
| 1663.75 46.00 | -0.92087078E 01 0.20264443E 05 0.13700418E 07 | -0.14063192E 02 0.42323170E 03 0.42420364E 01 | 0.28030627E 05 0.16087640E 04 -0.12706930E 02 | 0.12743335E 04 0.33599735E 02 0.22455755E 03 | -0.15518673E 02 0.24957358E-01 | 0.12234694E 03 0.48425252E-04 |
| 1664-25 46-50 | -0.92115941E 01 0.18920062E 05 0.13419660E 07 | -0.14058605E 02 0.39515373E 03 0.40474517E 01 | 0.27863139E 05 0.16499305E 04 -0.11863929E 02 | 0.12154296E 04 0.34459516E 02 0.22439153E 03 | -0.15724804E 02 0.25614928E-01 | 0.12234492E 03 0.49701148E-04 |
| 1664.75 47.00 | -0.92143457E 01 0.17688544E 05 0.13147818E 07 | -0.14054234E 02 0.36943293E 03 0.38659186E 01 | 0.27701062E 05 0.16908034E 04 -0.11091698E 02 | 0.11605004E 04 0.35313164E 02 0.22423086E 03 | -0.15941257E 02 0.26268282E-01 | 0.12234294E 03 0.50968865E-04 |
| 1665-25 47-50 | -0.92169713E 01 0.16558490E 05 0.12884309E 07 | -0.14050057E 02 0.34583125E 03 0.36963606E 01 | 0.27544319E 05 0.17313245E 04 -0.10383092E 02 | 0.11092166E 04 0.36159465E 02 0.22407547E 03 | -0.16168227E 02 0.26916471E-01 | 0.12234097E 03 0.52226558E-04 |

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Reynolds number | Longitude, deg Dynamic pressure, lb/ft ² Mach number | Altitude m Atmospheric pressure, N/m ² Accelerations, g units | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|--|--|---|--|---|--|
| | nambe | number | | o _K | | |
| 1665.75 48.00 | -0.92194792E 01 0.15521865E 05 0.12630295E 07 | -0.14046072E 02 0.32418089E 03 0.35378107E 01 | 0.27391995E 05 0.17716632E 04 -0.97330705E 01 | 0.10612806E 04 0.37001956E 02 0.22392445E 03 | -0.16405890E 02 0.27562181E-01 | 0.12233902E 0 0.53479442E-0 |
| 1666.25 48.50 | -0.92218767E 01 0.14568659E 05 0.12384583E 07 | -0.14042261E 02 0.30427278E 03 0.33893798E 01 | 0.27244319E 05 0.18116969E 04 -0.91353576E 01 | 0.10164215E 04 0.37838078E 02 0.22377804E 03 | -0.16654423E 02 0.28203437E-01 | 0.12233709E 0 0.54723683E-0 |
| 1666.75 49.00 | -0.92241708E 01 0.13691898E 05 0.12147701E 07 | -0.14038613E 02 0.28596125E 03 0.32502704E 01 | 0.27100682E 05 0.18515316E 04 -0.85855801E 01 | 0.97439458E 03 0.38670043E 02 0.22363562E 03 | -0.16913996E 02 0.28841916E-01 | 0.12233518E 0 0.55962536E-0 |
| 1667.25 49.50 | -0.92263681E 01 0.12884285E 05 0.11919242E 07 | -0.14035120E 02 0.26909389E 03 0.31197496E 01 | 0.26960931E 05 0.18911556E 04 -0.80791614E 01 | 0.93497614E 03 0.39497608E 02 0.22349705E 03 | -0.17184769E 02 0.29477417E-01 | 0.12233327E 0 0.57195611E-0 |
| 1667.75 50.00 | -0.92284743E 01 0.12140379E 05 0.11699857E 07 | -0.14031773E 02 0.25355709E 03 0.29971602E 01 | 0.26824381E 05 0.19307177E 04 -0.76126913E 01 | 0.89796446E 03 0.40323877E 02 0.22336165E 03 | -0.17466891E 02 0.30112312E-01 | 0.12233139E 0 0.58427511E-0 |
| 1668-25 50-50 | -0.92304945E 01 0.11453637E 05 0.11488573E 07 | -0.14028559E 02 0.23921419E 03 0.28818906E 01 | 0.26691184E 05 0.19701300E 04 -0.71820660E 01 | 0.86317377E 03 0.41147021E 02 0.22322956E 03 | -0.17760513E 02 0.30745185E-01 | 0.12232950E 0 0.59655487E-0 |
| 1668.75 51.00 | -0.92324340E 01 0.10819281E 05 0.11285507E 07 | -0.14025476E 02 0.22596539E 03 0.27733968E 01 | 0.26560958E 05 0.20094669E 04 -0.67842897E 01 | 0.83043775E 03 0.41968589E 02 0.22310042E 03 | -0.18065766E 02 0.31377215E-01 | 0.12232763E (|
| 1669.25 51.50 | -0.92342975E 01 0.10232653E 05 0.11090438E 07 | -0.14022511E 02 0.21371342E 03 0.26711723E 01 | 0.26433475E 05 0.20487591E 04 -0.64164416E 01 | 0.79960205E 03 0.42789224E 02 0.22297400E 03 | -0.18382774E 02 0.32008891E-01 | 0.12232576E (0.62107480E-(|
| 1669•75 52•00 | -0.92360889E 01 0.96893301E 04 0.10902836E 07 | -0.14019663E 02 0.20236587E 03 0.25747645E 01 | 0.26308736E 05 0.20879743E 04 -0.60757476E 01 | 0.77052902E 03 0.43608252E 02 0.22285028E 03 | -0.18711656E 02 0.32639681E-01 | 0.12232390E 0.63331415E- |
| 1670-25 52-50 | -0.92378125E 01 0.91859562E 04 0.10722940E 07 | -0.14016921E 02 0.19185269E 03 0.24837557E 01 | 0.26186282E 05 0.21272231E 04 -0.57601042E 01 | 0.74309098E 03 0.44427980E 02 0.22272884E 03 | -0.19052520E 02 0.33271359E-01 | 0.12232204E 0.64557073E- |
| 1670.75 53.00 | -0.92394718E 01 0.87188712E 04 0.10550233E 07 | -0.14014281E 02 0.18209742E 03 0.23977622E 01 | 0.26066115E 05 0.21664789E 04 -0.54672161E 01 | 0.71717146E 03 0.45247855E 02 0.22260965E 03 | -0.19405457E 02 0.33903491E-01 | 0.12232019E 0.65783611E- |
| 1671.25 53.50 | -0.92410702E 01 0.82849375E 04 0.10384380E 07 | -0.14011737E 02 0.17303452E 03 0.23164376E 01 | 0.25948157E 05 0.22057407E 04 -0.51951156E 01 | 0.69266514E 03 0.46067854E 02 0.22249265E 03 | -0.19770556E 02 0.34536055E-01 | 0.12231832E 0.67010988E- |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|---|--|---|---|--|--|---|
| | | | Atmospheric pressure, N/m ² | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, |
| | Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | | slug/ft ³ |
| 1671-75 54-00 | -0.92426111E 01 0.78820527E 04 0.10226043E 07 | -0.14009285E 02 0.16462010E 03 0.22394632E 01 | 0.25831724E 05 0.22452150E 04 -0.49424844E 01 | 0.66947430E 03 0.46892291E 02 0.22237716E 03 | -0.20147890E 02 0.35172374E-01 | 0.12231647E 03 0.68245648E-04 |
| 1672.25 54.50 | -0.92440969E 01 0.75067526E 04 0.10073775E 07 | -0.14006921E 02 0.15678179E 03 0.21665416E 01 | 0.25717424E 05 0.22846752E 04 -0.47071504E 01 | 0.64750970E 03 0.47716434E 02 0.22226378E 03 | -0.20537519E 02 0.35808795E-01 | 0.12231460E 03 0.69480509E-04 |
| 1672•75 55•00 | -0.92455310E 01 0.71573772E 04 0.99281707E 06 | -0.14004640E 02 0.14948493E 03 0.20974087E 01 | 0.25604648E 05 0.23243106E 04 -0.44880726E 01 | 0.62669033E 03 0.48544238E 02 0.22215191E 03 | -0.20939488E 02 0.36448366E-01 | 0.12231274E 03 0.70721482E-04 |
| 1673.25 55.50 | -0.92469152E 01 0.68317745E 04 0.97889362E 06 | -0.14002437E 02 0.14268458E 03 0.20318145E 01 | 0.25493320E 05 0.23641327E 04 -0.42839017E 01 | 0.60694032E 03 0.49375939E 02 0.22204148E 03 | -0.21353837E 02 0.37091270E-01 | 0.12231086E 03 0.71968920E-04 |
| 1673.75 56.00 | -0.92482525E 01 0.65277963E 04 0.96554736E 06 | -0.14000306E 02 0.13633586E 03 0.19695308E 01 | 0.25383592E 05 0.24040720E 04 -0.40932904E 01 | 0.58819081E 03 0.50210089E 02 0.22193262E 03 | -0.21780579E 02 0.37736384E-01 | 0.12230898E 03 0.73220647E-04 |
| 1674-25 56-50 | -0.92495451E 01 0.62439626E 04 0.95279084E 06 | -0.13998250E 02 0.13040787E 03 0.19103503E 01 | 0.25275159E 05 0.2444222E 04 -0.39153110E 01 | 0.57037857E 03 0.51048644E 02 0.22182505E 03 | -0.22219734E 02 0.38385221E-01 | 0.12230709E 03 0.74479600E-04 |
| 1674.75 57.00 | -0.92507948E 01 0.59788484E 04 0.94062655E 06 | -0.13956259E 02 0.12487085E 03 0.18540801E 01 | 0.25167793E 05 0.24846601E 04 -0.37490697E 01 | 0.55344488E 03 0.51893207E 02 0.22171853E 03 | -0.22671274E 02 0.39039023E-01 | 0.12230520E 03 0.75748185E-04 |
| 1675.25 57.50 | -0.92520038E 01 0.57308055E 04 0.92900027E 06 | -0.13994337E 02 0.11969036E 03 0.18005410E 01 | 0.25061646E 05 0.25253182E 04 -0.35935331E 01 | 0.53733572E 03 0.52742368E 02 0.22161321E 03 | -0.23135189E 02 0.39696699E-01 | 0.12230329E 03 0.77024286E-04 |
| 1675.75 58.00 | -0.92531737E 01 0.54984167E 04 0.91787109E 06 | -0.13992476E 02 0.11483682E 03 0.17495679E 01 | 0.24956795E 05 0.25661526E 04 -0.34478123E 01 | 0.52200127E 03 0.53595213E 02 0.22150918E 03 | -0.23611447E 02 0.40357541E-01 | 0.12230137E 03 0.78306530E-04 |
| 1676.25 58.50 | -0.92543064E 01 0.52810476E 04 0.90731469E 06 | -0.13990672E 02 0.11029698E 03 0.17010118E 01 | 0.24852554E 05 0.26074254E 04 -0.33115099E 01 | 0.50739555E 03 0.54457213E 02 0.22140575E 03 | -0.24099977E 02 0.41025788E-01 | 0.12229944E 03 0.79603144E-04 |
| 1676.75 59.00 | -0.92554032E 01 0.50769794E 04 0.89720378E 06 | -0.13988924E 02 0.10603492E 03 0.16547280E 01 | 0.24749607E 05 0.26488578E 04 -0.31835478E 01 | 0.49347566E 03 0.55322546E 02 0.22130361E 03 | -0.24600706E 02 0.41696930E-01 | 0.12229750E 03 0.80905374E-04 |
| 1677.25 59.50 | -0.92564660E 01 0.48859264E 04 0.88764748E 06 | -0.13987233E 02 0.10204470E 03 0.16105899E 01 | 0.24647042E 05 0.26908124E 04 -0.30637470E 01 | 0.48020228E 03 0.56198787E 02 0.22120183E 03 | -0.25113556E 02 0.42376847E-01 | 0.12229554E 03 0.82224629E-04 |

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Reynolds | Longitude, deg Dynamic pressure, lb/ft ² Mach | Altitude m Atmospheric pressure, N/m ² Accelerations, g units | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|---|--|---|--|---|--|
| | number | number | g units | °K | | |
| 1677.75 60.00 | -0.92574961E 01 0.47062797E 04 0.87850164E 06 | -0.13985591E 02 0.98292697E 02 0.15684726E 01 | 0.24545696E 05 0.27329413E 04 -0.29510985E 01 | 0.46753856E 03 0.57078668E 02 0.22110127E 03 | -0.25638406E 02 0.43059901E-01 | 0.12229356E 03 0.83549972E-04 |
| 1678.25 60.50 | -0.92584947E 01 0.45377586E 04 0.86985423E 06 | -0.13984003E 02 0.94773061E 02 0.15282660E 01 | 0.24444807E 05 0.27755557E 04 -0.28454264E 01 | 0.45545041E 03 0.57968688E 02 0.22100115E 03 | -0.26175126E 02 0.43751138E-01 | 0.12229157E 03 0.84891193E-04 |
| 1678.75 61.00 | -0.92594634E 01 0.43793387E 04 0.86164123E 06 | -0.13982459E 02 0.91464394E 02 0.14898634E 01 | 0.24344681E 05 0.28185263E 04 -0.27460884E 01 | 0.44390593E 03 0.58866147E 02 0.22090179E 03 | -0.26723584E 02 0.44448467E-01 | 0.12228956E 03 0.86244236E-04 |
| 1679.25 61.50 | -0.92604029E 01 0.42304603E 04 0.85387666E 06 | -0.13980963E 02 0.88355002E 02 0.14531685E 01 | 0.24245087E 05 0.28619503E 04 -0.26527334E 01 | 0.43287580E 03 0.59773076E 02 0.22080295E 03 | -0.27283603E 02 0.45153472E-01 | 0.12228752E 03 0.87612170E-04 |
| 1679.75 62.00 | -0.92613146E 01 0.40903019E 04 0.84651064E 06 | -0.13979508E 02 0.85427733E 02 0.14180899E 01 | 0.24146256E 05 0.29057235E 04 -0.25648462E 01 | 0.42233260E 03 0.60687299E 02 0.22070487E 03 | -0.27855000E 02 0.45864463E-01 | 0.12228548E 03 0.88991720E-04 |
| 1680•25 62•50 | -0.92621999E 01 0.39584989E 04 0.83957851E 06 | -0.13978098E 02 0.82674971E 02 0.13845431E 01 | 0.24047805E 05 0.29500136E 04 -0.24821985E 01 | 0.41225048E 03 0.61612317E 02 0.22060716E 03 | -0.28437583E 02 0.46584169E-01 | 0.12228341E 03 0.90388179E-04 |
| 1680.75 63.00 | -0.92630594E 01 0.38344390E 04 0.83305496E 06 | -0.13976729E 02 0.80083926E 02 0.13524487E 01 | 0.23949812E 05 0.29947920E 04 -0.24044060E 01 | 0.40260553E 03 0.62547534E 02 0.22050990E 03 | -0.29031115E 02 0.47312131E-01 | 0.12228131E 03 0.91800658E-04 |
| 1681.25 63.50 | -0.92638937E 01 0.37174630E 04 0.82689368E 06 | -0.13975400E 02 0.77640831E 02 0.13217319E 01 | 0.23852505E 05 0.30399492E 04 -0.23310556E 01 | 0.39337540E 03 0.63490661E 02 0.22041332E 03 | -0.29635370E 02 0.48046574E-01 | 0.12227920E 03 0.93225713E-04 |
| 1681.75 64.00 | -0.92647043E 01 0.36073701E 04 0.82114291E 06 | -0.13974109E 02 0.75341493E 02 0.12923247E 01 | 0.23755426E 05 0.30857012E 04 -0.22620212E 01 | 0.38453909E 03 0.64446211E 02 0.22031697E 03 | -0.30250068E 02 0.48791016E-01 | 0.12227705E 03 0.94670168E-04 |
| 1682.25 64.50 | -0.92654920E 01 0.35036256E 04 0.81576877E 06 | -0.13972856E 02 0.73174745E 02 0.12641618E 01 | 0.23658728E 05 0.31319786E 04 -0.21969677E 01 | 0.37607712E 03 0.65412734E 02 0.22022099E 03 | -0.30874932E 02 0.49544337E-01 | 0.12227489E 03 0.96131851E-04 |
| 1682.75 65.00 | -0.92662573E 01 0.34058196E 04 0.81075952E 06 | -0.13971633E 02 0.71132023E 02 0.12371811E 01 | 0.23562411E 05 0.31787878E 04 -0.21356379E 01 | 0.36797068E 03 0.66390366E 02 0.22012538E 03 | -0.31509656E 02 0.50306646E-01 | 0.12227268E 03 0.97610974E-04 |
| 1683.25 65.50 | -0.92670012E 01 0.33136158E 04 0.80611255E 06 | -0.13970448E 02 0.69206307E 02 0.12113259E 01 | 0.23466399E 05 0.32261651E 04 -0.20778210E 01 | 0.36020266E 03 0.67379861E 02 0.22003008E 03 | -0.32153925E 02 0.51078541E-01 | 0.12227047E 03 0.99108698E-04 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg | | latitude, deg deg m Dynamic Atmospheric | m Atmospheric | Earth relative velocity, m/sec Atmospheric | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|---|---|---|---|--|--|---|---|
| | Dynamic pressure, N/m ² | Danie a mad a | pressure, N/m ² Accelerations. | pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ | |
| | Reynolds number | Mach number | g units | Temperature OK | | | |
| 1683.75 66.00 | -0.92677245E 01 0.32267419E 04 0.80183748E 06 | -0.13969294E 02 0.67391908E 02 0.11865418E 01 | 0.23370540E 05 0.32741955E 04 -0.20233462E 01 | 0.35275649E 03 0.68382996E 02 0.21993492E 03 | -0.32807404E 02 0.51861415E-01 | 0.12226821E 03 0.10062772E-03 | |
| 1684.25 66.50 | -0.92684274E 01 0.31446775E 04 0.79787409E 06 | -0.13968174E 02 0.65677957E 02 0.11627767E 01 | 0.23275214E 05 0.33226906E 04 -0.19718873E 01 | 0.34561681E 03 0.69395837E 02 0.21984029E 03 | -0.33469724E 02 0.52652204E-01 | 0.12226593E 0: 0.10216211E-0: | |
| 1684.75 67.00 | -0.92691110E 01 0.30673227E 04 0.79426252E 06 | -0.13967084E 02 0.64062367E 02 0.11399848E 01 | 0.23180040E 05 0.33718460E 04 -0.19233815E 01 | 0.33876947E 03 0.70422469E 02 0.21974581E 03 | -0.34140514E 02 0.53454108E-01 | 0.12226361E 0 0.10371806E-0 | |
| 1685.25 67.50 | -0.92697760E 01 0.29943157E 04 0.79097310E 06 | -0.13966022E 02 0.62537586E 02 0.11181189E 01 | 0.23085171E 05 0.34215904E 04 -0.18776021E 01 | 0.33220036E 03 0.71461403E 02 0.21965163E 03 | -0.34819392E 02 0.54265967E-01 | 0.12226126E 0 0.10529332E-0 | |
| 1685.75 68.00 | -0.92704228E 01 0.29255133E 04 0.78802754E 06 | -0.13964991E 02 0.61100616E 02 0.10971378E 01 | 0.22990378E 05 0.34720516E 04 -0.18344592E 01 | 0.32589688E 03 0.72515307E 02 0.21955752E 03 | -0.35505929E 02 0.55089878E-01 | 0.12225888E 0 0.10689197E-0 | |
| 1686-25 68-50 | -0.92710521E 01 0.28606686E 04 0.78541745E 06 | -0.13963990E 02 0.59746307E 02 0.10770003E 01 | 0.22895661E 05 0.35232408E 04 -0.17937980E 01 | 0.31984668E 03 0.73584416E 02 0.21946348E 03 | -0.36199725E 02 0.55926033E-01 | 0.12225647E 0 0.10851438E-0 | |
| 1686.75 69.00 | -0.92716641E 01 0.27993785E 04 0.78308477E 06 | -0.13963014E 02 0.58466237E 02 0.10576667E 01 | 0.22801402E 05 0.35749532E 04 -0.17553656E 01 | 0.31403803E 03 0.74664453E 02 0.21936990E 03 | -0.36900314E 02 0:56771095E-01 | 0.12225401E 0 0.11015407E-0 | |
| 1687.25 69.50 | -0.92722596E 01 0.27416470E 04 0.78108244E 06 | -0.13962064E 02 0.57260490E 02 0.10391017E 01 | 0.22707143E 05 0.36274532E 04 -0.17191648E 01 | 0.30845998E 03 0.75760936E 02 0.21927631E 03 | -0.37607275E 02 0.57629394E-01 | 0.12225153E 0 0.11181945E-0 | |
| 1687.75 70.00 | -0.92728391E 01 0.26871117E 04 0.77935373E 06 | -0.13961139E 02 0.56121495E 02 0.10212710E 01 | 0.22613264E 05 0.36805279E 04 -0.16849681E 01 | 0.30310244E 03 0.76869426E 02 0.21918309E 03 | -0.38320121E 02 0.58497460E-01 | 0.12224899E 0 0.11350377E-0 | |
| 1688.25 70.50 | -0.92734029E 01 0.26357825E 04 0.77794963E 06 | -0.13960237E 02 0.55049464E 02 0.10041412E 01 | 0.22519310E 05 0.37344478E 04 -0.16527819E 01 | 0.29795507E 03 0.77995565E 02 0.21908980E 03 | -0.39038382E 02 0.59379724E-01 | 0.12224642E 0 0.11521565E-0 | |
| 1688.75 71.00 | -0.92739516E 01 0.25873893E 04 0.77683465E 06 | -0.13959363E 02 0.54038750E 02 0.98768047E 00 | 0.22425508E 05 0.37890931E 04 -0.16224366E 01 | 0.29300842E 03 0.79136856E 02 0.21899666E 03 | -0.39761569E 02 0.60274237E-01 | 0.12224381E 0 0.11695129E-0 | |
| 1689.25 71.50 | -0.92744857E 01 0.25417475E 04 0.77599378E 06 | -0.13958509E 02 0.53085502E 02 0.97185961E 00 | 0.22331934E 05 0.38444284E 04 -0.15938167E 01 | 0.28825378E 03 0.80292558E 02 0.21890374E 03 | -0.40489207E 02 0.61180430E-01 | 0.12224116E 0 0.11870959E-0 | |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|---|---|--|---|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² | Dynamic pressure, lb/ft ² | Atmospheric pressure, N/m ² | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | 5/ | Brug/it |
| 1689•75 72•00 | -0.92750058E 01 0.24988564E 04 0.77546845E 06 | -0.13957683E 02 0.52189701E 02 0.95665016E 00 | 0.22238208E 05 0.39006899E 04 -0.15669216E 01 | 0.28368233E 03 0.81467605E 02 0.21881067E 03 | -0.41220771E 02 0.62102185E-01 | 0.12223845E 03 0.12049809E-03 |
| 1690.25 72.50 | -0.92755114E 01 0.24582719E 04 0.77515650E 06 | -0.13956873E 02 0.51342077E 02 0.94202335E 00 | 0.22145092E 05 0.39574280E 04 -0.15414729E 01 | 0.27928590E 03 0.82652605E 02 0.21871820E 03 | -0.41955765E 02 0.63032138E-01 | 0.12223571E 03 0.12230250E-03 |
| 1690.75 73.00 | -0.92760040E 01 0.24201970E 04 0.77515843E 06 | -0.13956088E 02 0.50546867E 02 0.92795573E 00 | 0.22051747E 05 0.40151581E 04 -0.15175978E 01 | 0.27505691E 03 0.83858321E 02 0.21862550E 03 | -0.42693699E 02 0.63978752E-01 | 0.12223291E 03 0.12413923E-03 |
| 1691.25 73.50 | -0.92764832E 01 0.23843820E 04 0.77542989E 06 | -0.13955323E 02 0.49798854E 02 0.91442079E 00 | 0.21958478E 05 0.40737098E 04 -0.14951398E 01 | 0.27098757E 03 0.85081201E 02 0.21853288E 03 | -0.43434027E 02 0.64939247E-01 | 0.12223008E 03 0.12600290E-03 |
| 1691.75 74.00 | -0.92769496E 01 0.23506794E 04 0.77595538E 06 | -0.13954578E 02 0.49094962E 02 0.90139469E 00 | 0.21865361E 05 0.41330425E 04 -0.14740064E 01 | 0.26707077E 03 0.86320389E 02 0.21844040E 03 | -0.44176258E 02 0.65912965E-01 | 0.12222718E 03 0.12789222E-03 |
| 1692-25 74-50 | -0.92774036E 01 0.23190130E 04 0.77674046E 06 | -0.13953854E 02 0.48433595E 02 0.88885528E 00 | 0.21772321E 05 0.41932189E 04 -0.14541498E 01 | 0.26329981E 03 0.87577199E 02 0.21834799E 03 | -0.44919859E 02 0.66900946E-01 | 0.12222424E 03 0.12980922E-03 |
| 1692.75 75.00 | -0.92778455E 01 0.22891906E 04 0.77774998E 06 | -0.13953147E 02 0.47810741E 02 0.87677974E 00 | 0.21679586E 05 0.42540969E 04 -0.14354495E 01 | 0.25966797E 03 0.88848662E 02 0.21825589E 03 | -0.45664342E 02 0.67900872E-01 | 0.12222123E 03 0.13174940E-03 |
| 1693.25 75.50 | -0.92782757E 01 0.22612852E 04 0.77903786E 06 | -0.13952461E 02 0.47227923E 02 0.86514848E 00 | 0.21586698E 05 0.43159904E 04 -0.14179513E 01 | 0.25616908E 03 0.90141336E 02 0.21816363E 03 | -0.46409185E 02 0.68917906E-01 | 0.12221817E 03 0.13372277E-03 |
| 1693.75 76.00 | -0.92786943E 01 0.22351169E 04 0.78056950E 06 | -0.13951792E 02 0.46681387E 02 0.85394078E 00 | 0.21493886E 05 0.43787600E 04 -0.14015423E 01 | 0.25279708E 03 0.91452307E 02 0.21807144E 03 | -0.47153881E 02 0.69949771E-01 | 0.12221506E 03 0.13572492E-03 |
| 1694.25 76.50 | -0.92791018E 01 0.22105432E 04 0.78232661E 06 | -0.13951139E 02 0.46168156E 02 0.84313688E 00 | 0.21401303E 05 0.44423143E 04 -0.13861333E 01 | 0.24954610E 03 0.92779665E 02 0.21797948E 03 | -0.47897942E 02 0.70994974E-01 | 0.12221191E 03 0.13775294E-03 |
| 1694.75 77.00 | -0.92794981E 01 0.21875356E 04 0.78430573E 06 | -0.13950507E 02 0.45687633E 02 0.83271860E 00 | 0.21308796E 05 0.45067664E 04 -0.13717062E 01 | 0.24641061E 03 0.94125774E 02 0.21788759E 03 | -0.48640866E 02 0.72055393E-01 | 0.12220869E 03 0.13981050E-03 |
| 1695.25 77.50 | -0.92798840E 01 0.21660663E 04 0.78653952E 06 | -0.13949889E 02 0.45239236E 02 0.82266829E 00 | 0.21216213E 05 0.45722363E 04 -0.13582437E 01 | 0.24338523E 03 0.95493144E 02 0.21779563E 03 | -0.49382184E 02 0.73133010E-01 | 0.12220538E 03 0.14190142E-03 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|---|---|--|---|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² | Dynamic pressure, lb/ft ² | Atmospheric pressure, N/m ² Accelerations. | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | Reynolds number | Mach number | g units | Temperature OK | · | |
| 1695.75 78.00 | -0.92802591E 01 0.21459258E 04 0.78896784E 06 | -0.13949292E 02 0.44818594E 02 0.81296773E 00 | 0.21123935E 05 0.46384677E 04 -0.13456146E 01 | 0.24046471E 03 0.96876415E 02 0.21770396E 03 | -0.50121410E 02 0.74223623E-01 | 0.12220203E 03 0.14401755E-03 |
| 1696.25 78.50 | -0.92806243E 01 0.21270739E 04 0.7915962GE 06 | -0.13948708E 02 0.44424863E 02 0.80360128E 00 | 0.21031886E 05 0.47055217E 04 -0.13337934E 01 | 0.23764432E 03 0.98276866E 02 0.21761252E 03 | -0.50858091E 02 0.75328244E-01 | 0.12219861E 03 0.14616087E-03 |
| 1696.75 79.00 | -0.92809796E 01 0.21095717E 04 0.79446938E 06 | -0.13948141E 02 0.44059323E 02 0.79455366E 00 | 0.20939684E 05 0.47736906E 04 -0.13228185E 01 | 0.23491927E 03 0.99700604E 02 0.21752092E 03 | -0.51591783E 02 0.76451705E-01 | 0.12219514E 03 0.14834075E-03 |
| 1697.25 79.50 | -0.92813252E 01 0.20932230E 04 0.79753278E 06 | -0.13947587E 02 0.43717872E 02 0.78580895E 00 | 0.20847710E 05 0.48427046E 04 -0.13125670E 01 | 0.23228499E 03 0.10114199E 03 0.21742955E 03 | -0.52322056E 02 0.77589571E-01 | 0.12219155E 03 0.15054857E-03 |
| 1697-75 80-00 | -0.92816614E 01 0.20779908E 04 0.80079129E 06 | -0.13947048E 02 0.43399741E 02 0.77735244E 00 | 0.20755889E 05 0.49126307E 04 -0.13030155E 01 | 0.22973704E 03 0.10260243E 03 0.21733833E 03 | -0.53048456E 02 0.78742960E-01 | 0.12218793E 03 0.15278652E-03 |
| 1698.25 80.50 | -0.92819884E 01 0.20638929E 04 0.80427034E 06 | -0.13946525E 02 0.43105301E 02 0.76917066E 00 | 0.20663992E 05 0.49836575E 04 -0.12941754E 01 | 0.22727126E 03 0.10408585E 03 0.21724703E 03 | -0.53770608E 02 0.79914996E-01 | 0.12218422E 03 0.15506064E-03 |
| 1698.75 81.00 | -0.92823062E 01 0.205067C1E 04 0.80788476E G6 | -0.13946017E 02 0.42829137E 02 0.76124888E 00 | 0.20572628E 05 0.50553231E 04 -0.12858839E 01 | 0.22488357E 03 0.10558262E 03 0.21715625E 03 | -0.54488119E 02 0.81098069E-01 | 0.12218046E 03 0.15735618E-03 |
| 1699.25 81.50 | -0.92826153E 01 0.20384706E 04 0.81171029E 06 | -0.13945525E 02 0.42574346E 02 0.75357533E 00 | 0.20481188E 05 0.51281127E 04 -0.12782342E 01 | 0.22257012E 03 0.10710286E 03 0.21706540E 03 | -0.55200606E 02 0.82300201E-01 | 0.12217659E 03 0.15968870E-03 |
| 1699.75 82.00 | -0.92829161E 01 0.20272941E 04 0.81576380E 06 | -0.13945043E 02 0.42340919E 02 0.74613835E 00 | 0.20389520E 05 0.52021693E 04 -0.12712259E 01 | 0.22032735E 03 0.10864957E 03 0.21697432E 03 | -0.55907707E 02 0.83523769E-01 | 0.12217265E 03 0.16206281E-03 |
| 1700-25 82-50 | -0.92832083E 01 0.20167661E 04 0.81990711E 06 | -0.13944572E 02 0.42121037E 02 0.73892390E 00 | 0.20298613E 05 0.52767016E 04 -0.12646243E 01 | 0.21815157E 03 0.11020621E 03 0.21688399E 03 | -0.56609092E 02 0.84755713E-01 | 0.12216864E 03 0.16445318E-03 |
| 1700.75 83.00 | -0.92834923E 01 0.20071865E 04 0.82427892E 06 | -0.13944121E 02 0.41920963E 02 0.73192253E 00 | 0.20207402E 05 0.53525893E 04 -0.12586173E 01 | 0.21603942E 03 0.11179115E 03 0.21679336E 03 | -0.57304405E 02 0.86010584E-01 | 0.12216451E 03 0.16688803E-03 |
| 1701.25 83.50 | -0.92837683E 01 0.19982128E 04 0.82875049E 06 | -0.13943677E 02 0.41733542E 02 0.72512154E 00 | 0.20116800E 05 0.54290838E 04 -0.12529903E 01 | 0.21398754E 03 0.11338878E 03 0.21670333E 03 | -0.57993362E 02 0.87276015E-01 | 0.12216033E 03 0.16934337E-03 |

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Congitude, deg Dynamic pressure, lb/ft ² | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg | |
|---|---|---|---|--|---|---|
| | | pressure, pressure, N/ | Atmospheric pressure, N/m ² | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | | |
| 17 61.75 8 4. 00 | -0.92840364E 01 0.19896914E 04 0.83315145E 06 | -0.13943250E 02 0.41555569E 02 0.71845175E 00 | 0.20026122E 05 0.55067699E 04 -0.12476469E 01 | 0.21199316E 03 0.11501128E 03 0.21665000E 03 | -0.58675696E 02 0.88546660E-01 | 0.12215605E 0 0.17180883E-0 |
| 1702-25 84-50 | -0.92842970E 01 0.19813615E 04 0.83731859E 06 | -0.13942830E 02 0.41381597E 02 0.71188337E 00 | 0.19935672E 05 0.55853766E 04 -0.12424236E 01 | 0.21005503E 03 0.11665302E 03 0.21665000E 03 | -0.59351070E 02 0.89810624E-01 | 0.12215166E 0 0.17426132E-0 |
| 1702.75 85.00 | -0.92845502E 01 0.19737036E 04 0.84163249E 06 | -0.13942424E 02 0.41221658E 02 0.70549719E 00 | 0.19845375E 05 0.56649723E 04 -0.12376217E 01 | 0.20817066E 03 0.11831541E 03 0.21665000E 03 | -0.60019263E 02 0.91090490E-01 | 0.12214719E 0 0.17674467E-0 |
| 1703.25 85.50 | -0.92847958E 01 0.19665830E 04 0.84604771E 06 | -0.13942031E 02 0.41072941E 02 0.69928350E 00 | 0.19755536E 05 0.57452927E 04 -0.12331567E 01 | 0.20633719E 03 0.11999294E 03 0.21665000E 03 | -0.60680019E 02 0.92382010E-01 | 0.12214261E (0.17925063E-0 |
| 1703.75 86.00 | -0.92850347E 01 0.19601302E 04 0.85063064E 06 | -0.13941649E 02 0.40938170E 02 0.69323382E 00 | 0.19665620E 05 0.58268235E 04 -0.12291104E 01 | 0.20455212E 03 0.12169574E 03 0.21665000E 03 | -0.61333108E 02 0.93692994E-01 | 0.12213797E 0.18179436E- |
| 1704-25 86-50 | -0.92852668E 01 0.19542548E 04 0.85535524E 06 | -0.13941280E 02 0.40815461E 02 0.68733826E 00 | 0.19575780E 05 0.59094435E 04 -0.12254262E 01 | 0.20281252E 03 0.12342130E 03 0.21665000E 03 | -0.61978314E 02 0.95021491E-01 | 0.12213314E 0.18437207E- |
| 1704.75 87.00 | -0.92854915E 01 0.19487371E 04 0.86013507E 06 | -0.13940918E 02 0.40700ZZZE 02 0.68158881E 00 | 0.19486626E 05 0.59925931E 04 -0.12219663E 01 | 0.20111603E 03 0.1251579IE 03 0.21665000E 03 | -0.62615462E 02 0.96358501E-01 | 0.12212827E 0.18696630E- |
| 1705.25 87.50 | -0.92857100E 01 0.19438030E 04 0.86507851E 06 | -0.13940570E 02 0.40597170E 02 0.67597801E 00 | 0.19397320E 05 0.60770601E 04 -0.12188723E 01 | 0.19946045E 03 0.12692204E 03 0.21665000E 03 | -0.63244363E 02 0.97716699E-01 | 0.12212328E 0.18960163E- |
| 1705.75 88.00 | -0.92859221E 01 0.19392768E 04 0.87011850E 06 | -0.13940228E 02 0.40502639E 02 0.67049764E 00 | 0.19308318E 05 0.61624261E 04 -0.12160342E 01 | 0.19784336E 03 0.12870495E 03 0.21665000E 03 | -0.63864855E 02 0.99089351E-01 | 0.12211815E 0.19226502E- |
| 1706.25 88.50 | -0.92861278E 01 0.19350880E 04 0.87523057E 06 | -0.13939897E 02 0.40415154E 02 0.66514158E 00 | 0.19219773E 05 0.62485459E 04 -0.12134075E 01 | 0.19626295E 03 0.13050360E 03 0.21665000E 03 | -0.64476780E 02 0.10047412E 00 | 0.12211292E 0.19495192E- |
| 1706.75 89.00 | -0.92863274E 01 0.19312954E 04 0.88045053E 06 | -0.13939579E 02 0.40335943E 02 0.65990222E 00 | 0.19131382E 05 0.63357197E 04 -0.12110294E 01 | 0.19471698E 03 0.13232426E 03 0.21665000E 03 | -0.65080030E 02 0.10187584E 00 | 0.12210760E 0.19767170E- |
| 1707-25 89-50 | -0.92865208E 01 0.19278283E 04 0.88575377E 06 | -0.13939265E 02 0.40263533E 02 0.65477367E 00 | 0.19043294E 05 0.64238055E 04 -0.12088553E 01 | 0.19320370E 03 0.13416397E 03 0.21665000E 03 | -0.65674486E 02 0.10329223E 00 | 0.12210208E 0.20041994E- |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg | |
|--|---|---|--|---|---|--|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² Reynolds number | pressure, N/m ² Reynolds | Dynamic pressure, lb/ft ² Mach number | Atmospheric pressure, N/m ² Accelerations, g units | Atmospheric pressure, lb/ft ² Temperature ^O K | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| 1707.75 90.00 | -0.92867087E 01 0.19247277E 04 0.89116716E 06 | -0.13938964E 02 0.40198774E 02 0.64974951E 00 | 0.18955283E 05 0.65130408E 04 -0.12069110E 01 | 0.19172122E 03 0.13602769E 03 0.21665000E 03 | -0.66260029E 02 0.10472709E 00 | 0.12209645E 03 0.20320404E-03 | |
| 17C8-25 90-50 | -0.92868905E 01 0.19218555E 04 0.89663382E 06 | -0.13938674E 02 0.40138787E 02 0.64482439E 00 | 0.18867729E 05 0.66030447E 04 -0.12051100E 01 | 0.19026797E 03 0.13790746E 03 0.21665000E 03 | -0.66836619E 02 0.10617432E 00 | 0.12209075E 03 0.20601212E-03 | |
| 17C8.75 91.00 | -0.92870673E 01 0.19193462E 04 0.90222386E 06 | -0.13938391E 02 0.40086380E 02 0.63999247E 00 | 0.18780099E 05 0.66943749E 04 -0.12035366E 01 | 0.18884222E 03 0.13981493E 03 0.21665000E 03 | -0.67404128E 02 0.10764287E 00 | 0.12208484E 03 0.20886159E-03 | |
| 1709-25 91-50 | -0.92872384E 01 0.19169288E 04 0.90781573E 06 | -0.13938114E 02 0.40035892E 02 0.63524921E 00 | 0.18693231E 05 0.67861608E 04 -0.12020207E 01 | 0.18744263E 03 0.14173192E 03 0.21665000E 03 | -0.67962543E 02 0.10911875E 00 | 0.12207882E 03 0.21172527E-03 | |
| 1709.75 92.00 | -0.92874037E 01 0.19147178E 04 0.91346909E 06 | -0.13937848E 02 0.39989715E 02 0.63058957E 00 | 0.18606668E 05 0.68788787E 04 -0.12006343E 01 | 0.18606771E 03 0.14366837E 03 0.21665000E 03 | -0.68511770E 02 0.11060962E 00 | 0.12207259E 03 0.21461802E-03 | |
| 1710.25 92.50 | -0.92875644E 01 0.19127444E 04 0.91920326E 06 | -0.13937592E 02 0.39948498E 02 0.62600994E 00 | 0.18520258E 05 0.69726990E 04 -0.11993969E 01 | 0.18471640E 03 0.14562785E 03 0.21665000E 03 | -0.69051812E 02 0.11211821E 00 | 0.12206630E 03 0.21754517E-03 | |
| 1710.75 93.00 | -0.928772C1E 01 0.19109635E C4 0.92500320E 06 | -0.13937342E 02 0.39911304E 02 0.62150555E 00 | 0.18434075E 05 0.70675485E 04 -0.11982802E 01 | 0.18338730E 03 0.14760882E 03 0.21665000E 03 | -0.69582628E 02 0.11364336E 00 | 0.12205984E 03 0.22050444E-03 | |
| 1711-25 93-50 | -0.92878709E 01 0.19093055E 04 0.93084155E C6 | -0.13937100E 02 0.39876674E 02 0.61707152E 00 | 0.18348274E 05 0.71632622E 04 -0.11972405E 01 | 0.18207895E 03 0.14960785E 03 0.21665000E 03 | -0.70104191E 02 0.11518239E 00 | 0.12205316E 03 0.22349066E-03 | |
| 1711.75 94.00 | -0.92880166E 01 0.19077638E 04 0.93671726E 06 | -0.13936864E 02 0.39844477E 02 0.61270572E 00 | 0.18262854E 05 0.72598419E 04 -0.11962738E 01 | 0.18079074E 03 0.15162495E 03 0.21665000E 03 | -0.70616508E 02 0.11673536E 00 | 0.12204633E 03 0.22650391E-03 | |
| 1712.25 94.50 | -0.92881578E 01 0.19063628E 04 0.94264775E 06 | -0.13936635E 02 0.39815215E 02 0.60840386E 00 | 0.18177662E 05 0.73574623E 04 -0.11953952E 01 | 0.17952139E 03 0.15366380E 03 0.21665000E 03 | -0.71119603E 02 0.11830506E 00 | 0.12203935E 03 0.22954963E-03 | |
| 1712.75 95.00 | -0.92882944E 01 0.19049792E 04 0.94857471E 06 | -0.13936417E 02 0.39786319E 02 0.60416359E 00 | 0.18093080E 05 0.74556855E 04 -0.11945277E 01 | 0.17827021E 03 0.15571523E 03 0.21665000E 03 | -0.71613458E 02 0.11988444E 00 | 0.12203221E 03 0.23261414E-03 | |
| 1713.25 95.50 | -0.92884268E 01 0.19037558E 04 0.95457339E 06 | -0.13936205E 02 0.39760767E 02 0.59998138E 00 | 0.18008574E 05 0.75551334E 04 -0.11937605E 01 | 0.17703617E 03 0.15779224E 03 0.21665000E 03 | -0.72098100E 02 0.12148353E 00 | 0.12202487E 03 0.23571687E-03 | |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² | Longitude, deg Dynamic pressure, lb/ft ² | Altitude m Atmospheric pressure, N/m ² | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|--|---|--|---|---|--|
| | Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | | |
| 1713.75 96.00 | -0.92885548E 01 0.19025895E 04 0.96059558E 06 | -0.13936000E 02 0.39736409E 02 0.59585469E 00 | 0.17924450E 05 0.76554514E 04 -0.11930292E 01 | 0.17581851E 03 0.15988743E 03 0.21665000E 03 | -0.72573570E 02 0.12309660E 00 | 0.12201728E 03 0.23884675E-03 |
| 1714.25 96.50 | -0.92886786E 01 0.19014261E 04 0.96661611E 06 | -0.13935799E 02 0.39712111E 02 0.59178136E 00 | 0.17840858E 05 0.77564561E 04 -0.11922997E 01 | 0.17461659E 03 0.16199696E 03 0.21665000E 03 | -0.73039901E 02 0.12472071E 00 | 0.12200957E 03 0.24199805E-03 |
| 1714.75 97.00 | -0.92887983E 01 0.19003431E 04 0.97267754E 06 | -0.13935604E 02 0.39689492E 02 0.58775859E 00 | 0.17757495E 05 0.78585150E 04 -0.11916206E 01 | 0.17342960E 03 0.16412850E 03 0.21665000E 03 | -0.73497134E 02 0.12636178E 00 | 0.12200168E 03 0.24518225E-03 |
| 1715.25 97.50 | -0.92889140E 01 0.18992633E 04 0.97874264E 06 | -0.13935420E 02 0.39646939E 02 0.58378444E 00 | 0.17674590E 05 0.79613476E 04 -0.11909435E 01 | 0.17225695E 03 0.16627621E 03 0.21665000E 03 | -0.73945308E 02 0.12801529E 00 | 0.12199347E 03 0.24839058E-03 |
| 1715.75 98.00 | -0.92890258E 01 0.18981800E 04 0.98480939E 06 | -0.13935239E 02 0.39644314E 02 0.57985721E 00 | 0.17592142E 05 0.80649506E 04 -0.11902642E 01 | 0.17109814E 03 0.16844000E 03 0.21665000E 03 | -0.74384509E 02 0.12968118E 00 | 0.12198517E 03 0.25162295E-03 |
| 1716.25 98.50 | -0.92891340E 01 0.18972414E 04 0.99095747E 06 | -0.13935064E 02 0.39624711E 02 0.57597473E 00 | 0.17509617E 05 0.81700023E 04 -0.11896756E 01 | 0.16995254E 03 0.17063405E 03 0.21665000E 03 | -0.74814764E 02 0.13137037E 00 | 0.12197658E 03 0.25490051E-03 |
| 1716.75 99.00 | -0.92892383E 01 0.18961479E 04 0.99763181E 06 | -0.13934897E 02 0.39601872E 02 0.57213569E 00 | 0.17428007E 05 0.82752394E 04 -0.11889899E 01 | 0.16881976E 03 0.17283197E 03 0.21665000E 03 | -0.75236138E 02 0.13306254E 00 | 0.12196771E 03 0.25818387E-03 |
| 1717.25 99.50 | -0.92893394E 01 0.18951158E 04 0.10031476E 07 | -0.13934733E 02 0.39580317E 02 0.56833809E 00 | 0.17346549E 05 0.83816333E 04 -0.11883428E 01 | 0.16769920E 03 0.17505406E 03 0.21665000E 03 | -0.75648758E 02 0.13477332E 00 | 0.12195859E 03 0.26150332E-03 |
| 1717.75 160.00 | -0.92894368E 01 0.18940280E 04 0.10092439E 07 | -0.13934576E 02 0.39557599E 02 0.56458084E 00 | 0.17265625E 05 0.84886876E 04 -0.11876607E 01 | 0.16659055E 03 0.17728993E 03 0.21665000E 03 | -0.76052647E 02 0.13649471E 00 | 0.12194932E 03 0.26484337E-03 |
| 1718.25 100.50 | -0.92895310E 01 0.18930404E 04 0.10154040E 07 | -0.13934426E 02 0.39536973E 02 0.56086309E 00 | 0.17184700E 05 0.85971124E 04 -0.11870414E 01 | 0.16549356E 03 0.17955443E 03 0.21665000E 03 | -0.76447889E 02 0.13823813E 00 | 0.12193980E 03 0.26822617E-03 |
| 1718.75 101.00 | -0.92896219E 01 0.18919210E 04 0.10215052E 07 | -0.13934279E 02 0.39513593E 02 0.55718353E 00 | 0.17104538E 05 0.87058844E 04 -0.11863395E 01 | 0.16440783E 03 0.18182618E 03 0.21665000E 03 | -0.76834590E 02 0.13998714E 00 | 0.12192993E 03 0.27161980E-03 |
| 1719.25 101.50 | -0.92897093E 01 0.18907541E 04 0.10275932E 07 | -0.13934135E 02 0.39489221E 02 0.55354083E 00 | 0.17024833E 05 0.88154030E 04 -0.11856077E 01 | 0.16333298E 03 0.18411352E 03 0.21665000E 03 | -0.77212833E 02 0.14174815E 00 | 0.12191980E 03 0.27503673E-03 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Geodetic Lo latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|---|---|---|--|---|--|
| Dynamic pressure, N/m ² | Dynamic pressure, lb/ft ² | Atmospheric pressure, N/m ² | Atmospheric pressure, lb/ft ² | Atmospheric density, | Atmospheric density, slug/ft ³ |
| Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | ag/ m | slug/it |
| -0.92897942E 01 0.18896043E 04 0.10337037E 07 | -0.13933999E 02 0.39465208E 02 0.54993410E 00 | 0.16945356E 05 0.89259821E 04 -0.11848868E 01 | 0.16226875E 03 0.18642302E 03 0.21665000E 03 | -0.77582677E 02 0.14352622E 00 | 0.12190944E 03 0.27848675E-03 |
| -0.92898761E 01 0.18883830E 04 0.10397873E 67 | -0.13933869E 02 0.39439700E 02 0.54636318E 00 | 0.16866413E 05 0.90371951E 04 -0.11841209E 01 | 0.16121508E 03 0.18874575E 03 0.21665000E 03 | -0.77944226E 02 0.14531449E 00 | 0.12189873E 03 0.28195656E-03 |
| -0.92899548E 01 0.18871967E 04 0.10459038E 07 | -0.13933739E 02 0.39414924E 02 0.54282679E 00 | 0.16787622E 05 0.91495779E 04 -0.11833771E 01 | 0.16017160E 03 0.19109291E 03 0.21665000E 03 | -0.78297631E 02 0.14712156E 00 | 0.12188775E 03 0.28546285E-03 |
| -0.92900308E 01 0.18859049E 04 0.10519765E 07 | -0.13933616E 02 0.39387944E 02 0.53932381E 00 | 0.16709441E 05 0.92624752E 04 -0.11825670E 01 | 0.15913797E 03 0.19345082E 03 0.21665000E 03 | -0.78642929E 02 0.14893690E 00 | 0.12187639E 03 0.28898519E-03 |
| -0.92901040E 01 0.188460C1E 04 0.10580555E 07 | -0.13933497E 02 0.39360692E 02 0.53585415E 00 | 0.16631564E 05 0.93763203E 04 ~0.11817488E 01 | 0.15811419E 03 0.19582853E 03 0.21665000E 03 | -0.78980239E 02 0.15076749E 00 | 0.12186482E 03 0.29253712E-03 |
| -0.92901747E 01 0.18831903E 04 0.10640889E 07 | -0.13933384E C2 0.39331247E O2 0.53241725E O0 | 0.16554297E 05 0.94906595E 04 -0.11808648E 01 | 0.15710006E 03 0.19821655E 03 0.21665000E 03 | -0.79309656E 02 0.15260601E 00 | 0.12185276E 03 0.29610445E-03 |
| -0.92902427E 01 0.18817425E C4 0.10701139E 07 | -0.13933275E 02 0.39301009E 02 0.52901264E 00 | 0.16477412E 05 0.96058218E 04 -0.11799569E 01 | 0.15609546E 03 0.20062177E 03 0.21665000E 03 | -0.79631318E 02 0.15445777E 00 | 0.12184057E 03 0.29969746E-03 |
| -0.92903082E 01 0.18802820E 04 0.10761433E 07 | -0.13933166E 02 0.39270507E 02 0.52564038E 00 | 0.16400831E 05 0.97219191E 04 -0.11790412E 01 | 0.15510041E 03 0.20304651E 03 0.21665000E 03 | -0.79945284E 02 0.15632457E 00 | 0.12182779E 03 0.30331964E-03 |
| -0.92903714E 01 0.18787592E 04 0.10821499E 07 | -0.13933067E 02 0.39238704E 02 0.52229944E 00 | 0.16324707E 05 0.98387169E 04 -0.11780863E 01 | 0.15411460E 03 0.20548588E 03 0.21665000E 03 | -0.80251686E 02 0.15820263E 00 | 0.12181473E 03 0.30696368E-03 |
| -0.92904326E 01 0.18772683E 04 0.10881860E 07 | -0.13932964E 02 0.39207565E 02 0.51899008E 00 | 0.16248736E 05 0.99566829E 04 -0.11771514E 01 | 0.15313811E 03 0.20794965E 03 0.21665000E 03 | -0.80550659E 02 0.16009948E 00 | 0.12180115E 03 0.31064417E-03 |
| -0.92904911E 01 0.18755986E 04 0.10941315E 07 | -0.13932872E 02 0.39172692E 02 0.51571080E 00 | 0.16173602E 05 0.10074741E 05 -0.11761044E 01 | 0.15217050E 03 0.21041534E 03 0.21665000E 03 | -0.80842254E 02 0.16199781E 00 | 0.12178737E 03 0.31432753E-03 |
| -0.92905476E 01 0.18739827E 04 0.11001185E 07 | -0.13932780E 02 0.39138942E 02 0.51246236E 00 | 0.16098545E 05 0.10194081E 05 -0.11750911E 01 | 0.15121198E 03 0.21290781E 03 0.21665000E 03 | -0.81126640E 02 0.16391674E 00 | 0.12177306E 03 0.31805088E-03 |
| | Dynamic pressure, N/m² Reynolds number -0.92897942E 01 0.18896043E 04 0.10337037E 07 0.18893030E 04 0.10357873E 07 0.92900308E 01 0.18879049E 04 0.10519765E 07 0.92901747E 01 0.18831903E 07 0.92901747E 01 0.18831903E 07 0.10640889E 07 0.10701139E 07 0.9290308E 01 0.1887425E 04 0.10701139E 07 0.9290308E 01 0.18817425E 04 0.10701139E 07 0.92903714E 01 0.18802820E 04 0.10761433E 07 0.92903714E 01 0.18802820E 04 0.10761433E 07 0.92903714E 01 0.1877592E 04 0.10821499E 07 0.92903714E 01 0.1877592E 04 0.10821499E 07 0.92904326E 01 0.18772683E 04 0.10881860E 07 0.92904315E 01 0.18755986E 04 0.10941315E 07 0.92905476E 01 0.18755986E 04 0.10941315E 07 0.92905476E 01 0.18739827E 04 | Dynamic pressure, N/m2 | Dynamic pressure, N/m2 | latitude, deg | Dynamic pressure, N/m Dynamic pressure, lb/ft Dynamic pressure, N/m Reynolds number Dynamic number Dynamic pressure, N/m Reynolds number Dynamic number Dynamic pressure, N/m Dynamic pressure, Dyna |

| Dynamic pressure, N/m ² Reynolds number 2.92906018£ 01 | Dynamic pressure, lb/ft ² Mach number | Atmospheric pressure, N/m ² Accelerations, g units | Atmospheric pressure, lb/ft ² Temperature | Atmospheric density, kg/m ³ | Atmospheric density, |
|--|---|--|--|--|----------------------------------|
| number | number | | Temperature | -6/ | |
| | | | Temperature ^O K | | |
| 0.11060542E 07 | -0.13932691E 02 0.39103022E 02 0.50924437E 00 | 0.16024098E 05 0.10313849E 05 -0.11740126E 01 | 0.15026245E 03 0.21540923E 03 0.21665000E 03 | -0.81403891E 02 0.16584257E 00 | 0.12175826E 0: 0.32178760E-0: |
| 0.92906541E 01 0.18704627E 04 0.11119513E 07 | -0.13932606E 02 0.39065427E 02 0.50605662E 00 | 0.15950184E 05 0.10434154E 05 -0.11728839E 01 | 0.14932185E 03 0.21792185E 03 0.21665000E 03 | -0.81674118E 02 0.16777703E 00 | 0.12174314E 0: 0.32554108E-0: |
| 0.92907046E 01 0.18687404E 04 0.11179029E 07 | -0.13932524E 02 0.39029456E 02 0.50289898E 00 | 0.15876270E 05 0.10555867E 05 -0.11718039E 01 | 0.14839012E 03 0.22046386E 03 0.21665000E 03 | -0.81937459E 02 0.16973412E 00 | 0.12172752E 0: 0.32933844E-0 |
| 0.92907530E 01 0.18668925E 04 0.11237876E 07 | -0.13932445E 02 0.38990861E 02 0.49977084E 00 | 0.15803042E 05 0.10677853E 05 -0.11706452E 01 | 0.14746710E 03 0.22301160E 03 0.21665000E 03 | -0.82194031E 02 0.17169560E 00 | 0.12171129E 0 0.33314436E-0 |
| 0.92907994E 01 0.18650134E 04 0.11296597E 07 | -0.13932370E 02 0.38951615E 02 0.49667254E 00 | 0.15730195E 05 0.10800605E 05 -0.11694669E 01 | 0.14655289E 03 0.22557533E 03 0.21665000E 03 | -0.82443908E 02 0.17366941E 00 | 0.12169468E 0 0.33697417E-0 |
| 0.92908442E 01 0.18630574E 04 0.11354912E 07 | -0.13932295E 02 0.38910765E 02 0.49360363E 00 | 0.15657881E 05 0.10923857E 05 -0.11682404E 01 | 0.14564735E 03 0.22814950E 03 0.21665000E 03 | -0.82687229E 02 0.17565125E 00 | 0.12167738E 0 0.34081958E-0 |
| 0.92908871E 01 0.18610961E 04 0.11413232E 07 | -0.13932226E 02 0.38869801E 02 0.49056436E 00 | 0.15585872E 05 0.11047989E 05 -0.11670105E 01 | 0.14475055E 03 0.23074206E 03 0.21665000E 03 | -0.82924096E 02 0.17764725E 00 | 0.12165971E 0 0.34469246E-0 |
| 0.92909287E 01 0.18591275E 04 0.11471551E 07 | -0.13932158E 02 0.38828686E 02 0.48755418E 00 | 0.15514167E 05 0.11173001E 05 -0.11657761E 01 | 0.14386234E 03 0.23335299E 03 0.21665000E 03 | -0.83154685E 02 0.17965740E 00 | 0.12164147E 0 0.34859278E-0 |
| 0.92909684E 01 0.18571290E 04 0.11529725E 07 | -0.13932093E 02 0.38786946E 02 0.48457273E 00 | 0.15442844E 05 0.11298754E 05 -0.11645229E 01 | 0.14298260E 03 0.23597940E 03 0.21665000E 03 | -0.83379025E 02 0.18167945E 00 | 0.12162248E 0 0.35251622E-0 |
| 0.92910067E 01 0.18550852E 04 0.11587632E 07 | -0.13932028E 02 0.38744260E 02 0.48162055E 00 | 0.15371978E 05 0.11425107E 05 ~0.11632413E 01 | 0.14211151E 03 0.23861832E 03 0.21665000E 03 | -0.83597263E 02 0.18371115E 00 | 0.12160302E (0.35645835E-(|
| 0.92910435E 01 0.18529742E 04 0.11645126E 07 | -0.13931970E 02 0.38700172E 02 0.47869738E 00 | 0.15301646E 05 0.11551908E 05 1-0.11619177E 01 | 0.14124897E 03 0.24126662E 03 0.21665000E 03 | -0.83809548E 02 0.18575007E 00 | 0.12158291E (0.36041451E-(|
| 0.92910787E 01 0.18508198E 04 0.11702341E 07 | -0.13931912E 02 0.38655177E 02 0.47580306E 00 | 0.15231770E 05 0.11679281E 05 -0.11605667E 01 | 0.14039494E 03 0.24392687E 03 0.21665000E 03 | -0.84015945E 02 0.18779817E 00 | 0.12156214E (0.36438849E-(|
| | .18704627E 04 .11119513E 07 .92907046E 01 .186647404E 04 .11179029E 07 .92907530E 01 .18668925E 04 .11237876E 07 .92907994E 01 .18650134E 04 .11296597E 07 .92908442E 01 .18630574E 04 .11354912E 07 .92908871E 01 .18610961E 04 .11413232E 07 .92909287E 01 .1851295E 04 .11471551E 07 .92909287E 01 .18571290E 04 .11529725E 07 .92910067E 01 .18550852E 04 .11587632E 07 .92910435E 07 .92910435E 07 .92910435E 07 | .18704627E 04 .11119513E 07 .92907046E 01 .18667404E 04 .11177029E 07 .92907530E 01 .1866925E 04 .11237876E 07 .92907994E 01 .118650134E 04 .11296597E 07 .92908442E 01 .11296597E 07 .92908442E 01 .113932295E 02 0.49667254E 00 0.49977084E 00 0.38951615E 02 0.49967254E 00 0.38951615E 02 0.49667254E 00 0.38960363E 00 0.49056436E 00 0.38828686E 02 0.49056436E 00 0.49056436E 00 0.49056436E 00 0.48755418E 00 0.92909084E 01 0.18550852E 04 0.185 | .18704627E 04 .11119513E 07 .50605662E 00 .92907046E 01 .11179029E 07 .5028989BE 00 .11178039E 01 .11179029E 07 .5028989BE 00 .11178039E 01 .18669425E 04 .11237876E 07 .5038990861E 02 .11237876E 07 .5038990861E 02 .11296597E 07 .11296597E 07 .113932295E 02 .11296578E 01 .11354912E 07 .11354912E 07 .11413232E 07 .1141413232E 07 .114141414 .114144 .11414 .11 | .18704627E 04 .1111951B 07 .0.5060562E 00 -0.11728839E 01 .21702185E 03 .2110513E 07 .0.5060562E 00 -0.11728839E 01 .21665000E 03 .292907046E 01 .3932524E 02 .11179029E 07 .50289898E 00 -0.11718039E 01 .21665000E 03 .11179029E 07 .38990861E 02 .10677853E 05 .122301160E 03 .11237876E 07 .49977084E 00 -0.11706452E 01 .0.49977084E 00 -0.11706452E 01 .0.21665000E 03 .292907994E 01 .18550134E 04 .38951615E 02 .38951615E 02 .38951615E 02 .38951615E 02 .38951615E 02 .316650365E 01 .392908442E 01 .38930876E 02 .316650365E 03 .392908841E 01 .38951615E 02 .38951615E | .18704627E 04 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec Geodetic latitude, deg Dynamic pressure, N/m ² | | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|--|---|---|--|---|---|
| | Dynamic Atmospheric pressure, pressure, N/m ² | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ | | |
| | Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | | siug/it |
| 1731.75 114.00 | -0.92911124E 01 0.18486888E 04 0.11759695E 07 | -0.13931858E 02 0.38610670E 02 0.47293735E 00 | 0.15162124E 05 0.11807638E 05 -0.11592305E 01 | 0.13954936E 03 0.24660766E 03 0.21665000E 03 | -0.84216568E 02 0.18986210E 00 | 0.12154056E 03 0.36839317E-03 |
| 1732.25 114.50 | -0.92911450E 01 0.18465381E 04 0.11816907E 07 | -0.13931803E 02 0.38565750E 02 0.47010007E 00 | 0.15092858E 05 0.11936694E 05 -0.11578818E 01 | 0.13871216E 03 0.24930305E 03 0.21665000E 03 | -0.84411564E 02 0.19193727E 00 | 0.12151825E 03 0.37241966E-03 |
| 1732.75 115.00 | -0.92911763E 01 0.18443247E 04 0.11873691E 07 | -0.13931752E 02 0.38519523E 02 0.46729107E 00 | 0.15024125E 05 0.12066154E 05 -0.11564939E 01 | 0.13788331E 03 0.25200686E 03 0.21665000E 03 | -0.84601047E 02 0.19401893E 00 | 0.12149537E 03 0.37645875E-03 |
| 1733.25 115.50 | -0.92912061E 01 0.18421193E 04 0.11930482E 07 | -0.13931704E 02 0.38473463E 02 0.46451057E 00 | 0.14955698E 05 0.12196437E 05 -0.11551110E 01 | 0.13706287E 03 0.25472790E 03 0.21665000E 03 | -0.84785077E 02 0.19611384E 00 | 0.12147182E 0 0.38052354E-0 |
| 1733.75 116.00 | -0.92912349E 01 0.18399016E 04 0.11967139E 07 | -0.13931656E 02 0.38427144E 02 0.46175850E 00 | 0.14887651E 05 0.12327393E 05 -0.11537204E 01 | 0.13625082E 03 0.25746296E 03 0.21665000E 03 | -0.84963819E 02 0.19821955E 00 | 0.12144725E 0 0.38460929E-0 |
| 1734.25 116.50 | -0.92912624E 01 0.18376663E 04 0.12043646E 07 | -0.13931612E 02 0.38380459E 02 0.45903388E 00 | 0.14819986E 05 0.12459012E 05 -0.11523187E 01 | 0.13544687E 03 0.26021188E 03 0.21665000E 03 | -0.85137349E 02 0.20033593E 00 | 0.12142173E 0 0.38871575E-0 |
| 1734.75 117.00 | -0.92912890E 01 0.18354400E 04 0.12100140E 07 | -0.13931567E 02 0.38333963E 02 0.45633699E 00 | 0.14752625E 05 0.12591437E 05 -0.11509228E 01 | 0.13465110E 03 0.26297764E 03 0.21665000E 03 | -0.85305815E 02 0.20246528E 00 | 0.12139565E 0 0.39284736E-0 |
| 1735.25 117.50 | -0.92913144E 01 0.18331878E 04 0.12156375E 07 | -0.13931523E 02 0.38286924E 02 0.45366861E 00 | 0.14685721E 05 0.12724360E 05 -0.11495105E 01 | 0.13386374E 03 0.26575379E 03 0.21665000E 03 | -0.85469276E 02 0.20460262E 00 | 0.12136835E 0 0.39699449E-0 |
| 1735.75 118.00 | -0.92913386E 01 0.18309216E 04 0.12212451E 07 | -0.13931485E 02 0.38239593E 02 0.45102720E 00 | 0.14619198E 05 0.12857919E 05 -0.11480894E 01 | 0.13308434E 03 0.26854324E 03 0.21665000E 03 | -0.85627887E 02 0.20675021E 00 | 0.12134029E 0 0.40116149E-0 |
| 1736.25 118.50 | -0.92913619E 01 0.18287132E 04 0.12268826E 07 | -0.13931444E 02 0.38193470E 02 0.44841325E 00 | 0.14552828E 05 0.12992573E 05 -0.11467046E 01 | 0.13231305E 03 0.27135553E 03 0.21665000E 03 | -0.85781743E 02 0.20891538E 00 | 0.12131136E 0 0.40536261E-0 |
| 1736.75 119.00 | -0.92913842E 01 0.18263865E 04 0.12324317E 07 | -0.13931410E 02 0.38144875E 02 0.44582628E 00 | 0.14487220E 05 0.13127069E 05 -0.11452456E 01 | 0.13154971E 03 0.27416455E 03 0.21665000E 03 | -0.85930910E 02 0.21107803E 00 | 0.12128153E 0 0.40955885E-0 |
| 1737.25 119.50 | -0.92914057E 01 0.18241438E 04 0.12380261E 07 | -0.13931373E 02 0.38098035E 02 0.44326670E 00 | 0.14421688E 05 0.13262802E 05 -0.11438394E 01 | 0.13079446E 03 0.27699939E 03 0.21665000E 03 | -0.86075560E 02 0.21326056E 00 | 0.12125015E 0 0.41379365E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time | Geodetic latitude, deg | Longitude, deg Dynamic | Altitude m Atmospheric | Earth relative velocity, m/sec Atmospheric | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|---|---|--|--|---|
| from entry point, sec Dynamic pressure, N/m ² | pressure, N/m ² | Pressure, N/m ² Reynolds number Results Results | pressure, N/m ² | pressure, lb/ft ² Temperature ^O K | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | | | 1 | | | |
| 1737.75 120.00 | -0.92914259E 01 0.18218291E 04 0.12435610E 07 | -0.13931339E 02 0.38049692E 02 0.44073382E 00 | 0.14356766E 05 0.13398658E 05 -0.11423879E 01 | 0.13004708E 03 0.27983681E 03 0.21665000E 03 | -0.86215739E 02 0.21544508E 00 | 0.12121791E 03 0.41803232E-03 |
| 1738.25 120.50 | -0.92914460E 01 0.18195744E 04 0.12491255E 07 | -0.13931308E 02 0.38002603E 02 0.43822747E 00 | 0.14291996E 05 0.13535586E 05 -0.11409741E 01 | 0.12930754E 03 0.28269659E 03 0.21665000E 03 | -0.86351583E 02 0.21764681E 00 | 0.12118476E 03 0.42230439E-03 |
| 1738.75 121.00 | -0.92914647E 01 0.18173393E 04 0.12546907E 07 | -0.13931277E 02 0.37955922E 02 0.43574779E 00 | 0.14227531E 05 0.13673260E 05 -0.11395726E 01 | 0.12857586E 03 0.28557198E 03 0.21665000E 03 | -0.86483183E 02 0.21986056E 00 | 0.12115021E 03 0.42659976E-03 |
| 1739.25 121.50 | -0.92914824E 01 0.18150322E 04 0.12601947E 07 | -0.13931246E 02 0.3790†735E 02 0.43329386E 00 | 0.14163675E 05 0.13811018E 05 -0.11381259E 01 | 0.12785178E 03 0.28844911E 03 0.21665000E 03 | -0.86610670E 02 0.22207565E 00 | 0.12111439E 0: 0.43089775E-0: |
| 1739.75 122.00 | -0.92914999E 01 0.18128115E 04 0.12657444E 07 | -0.13931216E 02 0.37861355E 02 0.43086626E 00 | 0.14099896E 05 0.13949997E 05 -0.11367334E 01 | 0.12713546E 03 0.29135175E 03 0.21665000E 03 | -0.86734070E 02 0.22431038E 00 | 0.12107755E 0: 0.43523384E-0: |
| 1740.25 122.50 | -0.92915164E 01 0.18105451E 04 0.12712485E 07 | -0.13931192E 02 0.37814022E 02 0.42846440E 00 | 0.14036650E 05 0.14089199E 05 -0.11353122E 01 | 0.12642675E 03 0.29425904E 03 0.21665000E 03 | -0.86853557E 02 0.22654869E 00 | 0.12103886E 0 0.43957687E-0 |
| 1740.75 123.00 | -0.92915320E 01 0.18082980E 04 0.12767519E 07 | -0.13931164E 02 0.37767089E 02 0.42608803E 00 | 0.13973708E 05 0.14229111E 05 -0.11339032E 01 | 0.12572556E 03 0.29718118E 03 0.21665000E 03 | -0.86969214E 02 0.22879842E 00 | 0.12099953E 0 0.44394208E-0 |
| 1741.25 123.50 | -0.92915471E 01 0.18060301E 04 0.12822249E 07 | -0.13931137E 02 0.37719724E 02 0.42373722E 00 | 0.13911224E 05 0.14369385E 05 -0.11324811E 01 | 0.12503191E 03 0.30011086E 03 0.21665000E 03 | -0.87081091E 02 0.23105398E 00 | 0.12095822E 0 0.44831858E-0 |
| 1741.75 124.00 | -0.92915617E 01 0.18038275E 04 0.12877284E 07 | -0.13931113E 02 0.37673722E 02 0.42141168E 00 | 0.13848893E 05 0.14510698E 05 -0.11310999E 01 | 0.12434571E 03 0.30306224E 03 0.21665000E 03 | -0.87189341E 02 0.23332623E 00 | 0.12091533E 0 0.45272747E-0 |
| 1742.25 124.50 | -0.92915754E 01 0.18015815E 04 0.12931849E 07 | -0.13931089E 02 0.37626813E 02 0.41911108E 00 | 0.13787094E 05 0.14652174E 05 -0.11296916E 01 | 0.12366687E 03 0.30601703E 03 0.21665000E 03 | -0.87294031E 02 0.23560111E 00 | 0.12087092E 0 0.45714146E-0 |
| 1742.75 125.00 | -0.92915889E 01 0.17994263E 04 0.12986886E C7 | -0.13931069E 02 0.37581800E 02 0.41683566E 00 | 0.13725373E 05 0.14794857E 05 -0.11283401E 01 | 0.12299546E 03 0.30899702E 03 0.21665000E 03 | -0.87395241E 02 0.23789539E 00 | 0.12082468E 0 0.46159310E-0 |
| 1743.25 125.50 | -0.92916014E 01 0.17972666E 04 0.13041744E 07 | -0.13931048E 02 0.37536694E 02 0.41458413E 00 | 0.13664031E 05 0.14938039E 05 -0.11269859E 01 | 0.12233111E 03 0.31198744E 03 0.21665000E 03 | -0.87493079E 02 0.24019770E 00 | 0.12077758E 0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|---|---|---|---|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² | Dynamic pressure, lb/ft ² | Atmospheric pressure, N/m ² | Atmospheric pressure, lb/ft ² Temperature | Atmospheric density, kg/m ³ | Atmospheric density, |
| | Reynolds number | Mach number | Accelerations, g units | | | slug/ft ³ |
| 1743.75 126.00 | -0.92916133E 01 0.17950414E 04 0.13095959E 07 | -0.13931024E 02 0.37490219E 02 0.41235666E 00 | 0.13603300E 05 0.15081165E 05 -0.11255905E 01 | 0.12167385E 03 0.31497668E 03 0.21665000E 03 | -0.87587674E 02 0.24249910E 00 | 0.12072792E 03 0.47052577E-03 |
| 1744-25 126-50 | -0.92916251E 01 0.17929298E 04 0.13150807E 07 | -0.13931007E 02 0.37446118E 02 0.41015379E 00 | 0.13542569E 05 0.15225665E 05 -0.11242665E 01 | 0.12102385E 03 0.31799463E 03 0.21665000E 03 | -0.87679016E 02 0.24482261E 00 | 0.12067690E 03 0.47503412E-03 |
| 1744.75 127.00 | -0.92916360E 01 0.17907691E 04 0.13205142E 07 | -0.13930987E 02 0.37400992E 02 0.40797388E 00 | 0.13482371E 05 0.15370264E 05 -0.11229116E 01 | 0.12038062E 03 0.32101464E 03 0.21665000E 03 | -0.87767281E 02 0.24714770E 00 | 0.12062426E 03 0.47954554E-03 |
| 1745-25 127-50 | -0.92916464E 01 0.17886345E 04 0.13259474E 07 | -0.13930970E 02 0.37356410E 02 0.40581787E 00 | 0.13422478E 05 0.15515498E 05 -0.11215731E 01 | 0.11974445E 03 0.32404791E 03 0.21665000E 03 | -0.87852496E 02 0.24948300E 00 | 0.12056888E 03 0.48407677E-03 |
| 1745.75 128.00 | -0.92916565E 01 0.17865813E 04 0.13314244E G7 | -0.13930953E 02 0.37313528E 02 0.40368455E 00 | 0.13362661E 05 0.15661919E 05 -0.11202856E 01 | 0.11911497E 03 0.32710598E 03 0.21665000E 03 | -0.87934779E 02 0.25183740E 00 | 0.12051180E 03 0.48864506E-03 |
| 1746.25 128.50 | -0.92916663E 01 0.17845281E 04 0.13368832E 07 | -0.13930936E 02 0.37270646E 02 0.40157417E 00 | 0.13303224E 05 0.15808778E 05 -0.11189982E 01 | 0.11849227E 03 0.33017320E 03 0.21665000E 03 | -0.88014204E 02 0.25419883E 00 | 0.12045198E 03 0.49322699E-03 |
| 1746.75 129.00 | ~0.92916753E 01 0.17824747E 04 0.13423235E 07 | -0.13930922E 02 0.37227759E 02 0.39948644E 00 | 0.13244170E 05 0.15956063E 05 -0.11177106E 01 | 0.11787624E 03 0.33324931E 03 0.21665000E 03 | -0.88090849E 02 0.25656712E 00 | 0.12039047E 03 0.49782222E-03 |
| 1747.25 129.50 | -0.92916842E 01 0.17804416E 04 0.13477605E 07 | -0.13930905E 02 0.37185297E 02 0.39742104E 00 | 0.13185419E 05 0.16103952E 05 -0.11164357E 01 | 0.11726680E 03 0.33633805E 03 0.21665000E 03 | -0.88164776E 02 0.25894511E 00 | 0.12032670E 03 0.50243630E-03 |
| 1747.75 130.00 | -0.92916925E 01 0.17784678E 04 0.13532252E 07 | -0.13930891E 02 0.37144073E 02 0.39537733E 00 | 0.13126822E 05 0.16252827E 05 -0.11151980E 01 | 0.11666377E 03 0.33944735E 03 0.21665000E 03 | -0.88236119E 02 0.26133896E 00 | 0.12025976E 03 0.50708112E-03 |
| 1748.25 130.50 | -0.92917005E 01 0.17764540E 04 0.13586391E 07 | -0.13930877E 02 0.37102015E 02 0.39335594E 00 | 0.13068757E 05 0.16401705E 05 -0.11139353E 01 | 0.11606732E 03 0.34255673E 03 0.21665000E 03 | -0.88304893E 02 0.26373286E 00 | 0.12019151E 03 0.51172605E-03 |
| 1748.75 131.00 | -0.92917C81E 01 0.17744773E 04 0.13640636E 07 | -0.13930864E 02 0.37060730E 02 0.39135570E 00 | 0.13010921E 05 0.16551355E 05 -0.11126957E 01 | 0.11547711E 03 0.34568224E 03 0.21665000E 03 | -0.88371231E 02 0.26613917E 00 | 0.12012047E 03 0.51639507E-03 |
| 1749.25 131.50 | -0.92917154E 01 0.17725391E 04 0.13694994E 07 | -0.13930850E 02 0.37020249E 02 0.38937657E 00 | 0.12953314E 05 0.16701775E 05 -0.11114804E 01 | 0.11489313E 03 0.34882383E 03 0.21665000E 03 | -0.88435106E 02 0.26855787E 00 | 0.12004556E 03 0.52108811E-03 |
| | | ļ | | | | |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|---|---|--|--|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² | Dynamic pressure, lb/ft ² | Atmospheric pressure, N/m ² | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | Reynolds Mach number number | Accelerations, g units | Temperature ^O K | | siug/it | |
| 1749.75 132.00 | -0.92917223E 01 0.17706366E 04 0.13749453E 07 | -0.13930840E 02 0.36980515E 02 0.38741805E 00 | 0.12895936E 05 0.16852959E 05 -0.11102874E 01 | 0.11431523E 03 0.35198138E 03 0.21665000E 03 | -0.88496717E 02 0.27098884E 00 | 0.11996840E 03 0.52580499E-03 |
| 1750.25 132.50 | -0.92917287E 01 0.17686907E 04 0.13803375E 07 | -0.13930830E 02 0.36939873E 02 0.38548053E 00 | 0.12839090E 05 0.17004091E 05 -0.11090672E 01 | 0.11374353E 03 0.35513783E 03 0.21665000E 03 | -0.88556075E 02 0.27341899E 00 | 0.11988916E 03 0.53052024E-03 |
| 1750.75 133.00 | -0.92917352E 01 0.17668501E 04 0.13857914E 07 | -0.13930816E 02 0.36901433E 02 0.38356389E 00 | 0.12782245E 05 0.17156580E 05 -0.11079131E 01 | 0.11317798E 03 0.35832264E 03 0.21665000E 03 | -0.88613212E 02 0.27587095E 00 | 0.11980615E 03 0.53527784E-03 |
| 1751-25 133-50 | -0.92917410E 01 0.17649564E 04 0.13911868E 07 | -0.13930806E 02 0.36861881E 02 0.38166678E 00 | 0.12725933E 05 0.17308988E 05 -0.11067256E 01 | 0.11261820E 03 0.36150574E 03 0.21665000E 03 | -0.88668228E 02 0.27832161E 00 | 0.11971955E 0: 0.54003290E-0: |
| 1751.75 134.00 | -0.92917467E 01 0.17631048E 04 0.13965943E 07 | -0.13930796E 02 0.36823209E 02 0.37979015E 00 | 0.12669850E 05 0.17462128E 05 -0.11055645E 01 | 0.11206447E 03 0.36470414E 03 0.21665000E 03 | -0.88721240E 02 0.28078404E 00 | 0.11963058E 01 0.54481080E-01 |
| 1752.25 134.50 | -0.92917522E 01 0.17613261E 04 0.14020427E 07 | -0.13930785E 02 0.36786061E 02 0.37793261E 00 | 0.12613843E 05 0.17616412E 05 -0.11044492E 01 | 0.11151636E 03 0.36792643E 03 0.21665000E 03 | -0.88772214E 02 0.28326487E 00 | 0.11953796E 0: 0.54962440E-0: |
| 1752.75 135.00 | -0.92917576E 01 0.17595651E 04 0.14074852E 07 | -0.13930779E 02 0.36749281E 02 0.37609482E 00 | 0.12558141E 05 0.17771213E 05 -0.11033449E 01 | 0.11097409E 03 0.37115950E 03 0.21665000E 03 | -0.88821277E 02 0.28575400E 00 | 0.11944068E 0 0.55445410E-0 |
| 1753.25 135.50 | -0.92917622E 01 0.17577312E 04 0.14128513E 07 | -0.13930768E 02 0.36710981E 02 0.37427590E 00 | 0.12503048E 05 0.17925661E 05 -0.11021950E 01 | 0.11043738E 03 0.37438523E 03 0.21665000E 03 | -0.88868492E 02 0.28823747E 00 | 0.11934039E 0 0.55927283E-0 |
| 1753.75 136.60 | -0.92917669E 01 0.17559959E 04 0.14182769E 07 | -0.13930761E 02 0.36674738E 02 0.37247602E 00 | 0.12447956E 05 0.18081452E 05 -0.11011069E 01 | 0.10990629E 03 0.37763899E 03 0.21665000E 03 | -0.88913885E 02 0.29074253E 00 | 0.11923704E 0 0.56413345E-0 |
| 1754.25 136.50 | -0.92917715E 01 0.17542719E 04 0.14236934E 07 | -0.13930751E 02 0.36638731E 02 0.37069461E 00 | 0.12393168E 05 0.18237730E 05 -0.11000258E 01 | 0.10938065E 03 0.38090292E 03 0.21665000E 03 | -0.88957550E 02 0.29325541E 00 | 0.11912901E 0 0.56900924E-0 |
| 1754.75 137.00 | -0.92917758E 01 0.17526007E 04 0.14291343E 07 | -0.13930744E 02 0.36603827E 02 0.36893154E 00 | 0.12338533E 05 0.18394918E 05 -0.10989779E 01 | 0.10886042E 03 0.38418585E 03 0.21665000E 03 | -0.88999516E 02 0.29578292E 00 | 0.11901555E 0 0.57391342E-0 |
| 1755.25 137.50 | -0.92917801E 01 0.17509825E 04 0.14346000E 07 | -0.13930737E 02 0.36570031E 02 0.36718660E 00 | 0.12284050E 05 0.18553020E 05 -0.10979632E 01 | 0.10834554E 03 0.38748789E 03 0.21665000E 03 | -0.89039871E 02 0.29832514E 00 | 0.11890017E 0 0.57884613E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec Geodetic latitude, deg Dynamic pressure, N/m ² | | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|---|---|--|---|---|
| | Dynamic Atmospheric pressure, pressure, N/m ² lb/ft ² | | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ | |
| | Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | 36/ | stug/it |
| 1755.75 138.00 | -0.92917838E 01 0.17492877E 04 0.14399857E 07 | -0.13930731E 02 0.36534634E 02 0.36545921E 00 | 0.12230176E 05 0.18710692E 05 -0.10969004E 01 | 0.10783585E 03 0.39078093E 03 0.21665000E 03 | -0.89078616E 02 0.30086045E 00 | 0.11878062E 03 0.58376544E-03 |
| 1756.25 138.50 | -0.92917876E 01 0.17476870E 04 0.14454299E 07 | -0.13930724E 02 0.36501202E 02 0.36374954E 00 | 0.12176303E 05 0.18869708E 05 -0.10958967E 01 | 0.10733137E 03 0.39410205E 03 0.21665000E 03 | -0.89115870E 02 0.30341737E 00 | 0.11865378E 03 0.58872668E-03 |
| 1756.75 139.00 | -0.92917907E 01 0.17460063E 04 0.14507915E 07 | -0.13930717E 02 0.36466101E 02 0.36205675E 00 | 0.12123039E 05 0.19028254E 05 -0.10948428E 01 | 0.10683188E 03 0.39741337E 03 0.21665000E 03 | -0.89151638E 02 0.30596673E 00 | 0.11852528E 03 0.59367326E-03 |
| 1757.25 139.50 | -0.92917943E 01 0.17444856E 04 0.14562653E 07 | -0.13930710E 02 0.36434340E 02 0.36038171E 00 | 0.12069547E 05 0.19188824E 05 -0.10938893E 01 | 0.10633763E 03 0.40076693E 03 0.21665000E 03 | -0.89185986E 02 0.30854862E 00 | 0.11839131E 03 0.59868295E-03 |
| 1757.75 140.00 | -0.92917974E 01 0.17428812E 04 0.14616543E 07 | -0.13930703E 02 0.36400832E 02 0.35872279E 00 | 0.12016664E 05 0.19348900E 05 -0.10928832E 01 | 0.10584813E 03 0.40411020E 03 0.21665000E 03 | -0.89218942E 02 0.31112259E 00 | 0.11825068E 03 0.60367727E-03 |
| 1758-25 140-50 | -0.92918005E 01 0.17413905E 04 0.14671193E 07 | -0.13930700E 02 0.36369697E 02 0.35708086E 00 | 0.11963705E 05 0.19510547E 05 -0.10919484E 01 | 0.10536365E 03 0.40748626E 03 0.21665000E 03 | -0.89250584E 02 0.31372181E 00 | 0.11810607E 03 0.60872059E-03 |
| 1758.75 141.00 | -0.92918034E 01 0.17398807E 04 0.14725522E 07 | -0.13930693E 02 0.36338164E 02 0.35545499E 00 | 0.11911127E 05 0.19672370E 05 -0.10910017E 01 | 0.10488390E 03 0.41086599E 03 0.21665000E 03 | -0.89280982E 02 0.31632384E 00 | 0.11795582E 03 0.61376937E-03 |
| 1759.25 141.50 | -0.92918059E 01 0.17383534E 04 0.14779531E 07 | -0.13930690E 02 0.36306267E 02 0.35384518E 00 | 0.11858930E 05 0.19834350E 05 -0.10900441E 01 | 0.10440890E 03 0.41424902E 03 0.21665000E 03 | -0.89310104E 02 0.31892842E 00 | 0.11779977E 03 0.61882308E-03 |
| 1759.75 142.00 | -0.92918085E 01 0.17368702E 04 0.14833743E 07 | -0.13930683E 02 0.36275289E 02 0.35225117E 00 | 0.11806885E 05 0.19997187E 05 -0.10891140E 01 | 0.10393856E 03 0.41764994E 03 0.21665000E 03 | -0.89338058E 02 0.32154677E 00 | 0.11763942E 03 0.62390352E-03 |
| 1760.25 142.50 | -0.92918110E 01 0.17354324E 04 0.14888167E 07 | -0.13930679E 02 0.36245260E 02 0.35067300E 00 | 0.11754993E 05 0.20160880E 05 -0.10882124E 01 | 0.10347289E 03 0.42106874E 03 0.21665000E 03 | -0.89364820E 02 0.32417889E 00 | 0.11747093E 03 0.62901068E-03 |
| 1760.75 143.00 | -0.92918133E 01 0.17340137E 04 0.14942600E 07 | -0.13930676E 02 0.36215630E 02 0.34910992E 00 | 0.11703329E 05 0.20325189E 05 -0.10873228E 01 | 0.10301167E 03 0.42450040E 03 0.21665000E 03 | -0.89390543E 02 0.32682091E 00 | 0.11729622E 03 0.63413703E-03 |
| 1761.25 143.50 | -0.92918155E 01 0.17325929E 04 0.14996861E 07 | -0.13930669E 02 0.36185956E 02 0.34756180E 00 | 0.11651971E 05 0.20489857E 05 -0.10864319E 01 | 0.10255486E 03 0.42793957E 03 0.21665000E 03 | -0.89415150E 02 0.32946870E 00 | 0.11711680E 03 0.63927461E-03 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Reynolds number | Longitude, deg Dynamic pressure, lb/ft ² Mach number | Altitude m Atmospheric pressure, N/m ² Accelerations, g units | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature OK | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|--|---|---|--|---|--|
| 1761.75 144.00 | -0.92918177E 01 0.17312144E 04 0.15051317E 07 | -0.13930666E 02 0.36157166E 02 0.34602876E 00 | 0.11600764E 05 0.20655367E 05 -0.10855675E 01 | 0.10210251E 03 0.43139631E 03 0.21665000E 03 | -0.89438769E 02 0.33213004E 00 | 0.11693177E 03 0.64443844E-03 |
| 1762.25 144.50 | -0.92918196E 01 0.17298128E 04 0.15105415E 07 | -0.13930662E 02 0.36127892E 02 0.34451037E 00 | 0.11549939E 05 0.20820970E 05 -0.10846886E 01 | 0.10165448E 03 0.43485500E 03 0.21665000E 03 | -0.89461348E 02 0.33479287E 00 | 0.11673796E 03 0.64960520E-03 |
| 1762 .7 5 145 . 00 | -0.92918214E 01 0.17284762E 04 0.15159898E 07 | -0.13930659E 02 0.36099977E 02 0.34300700E 00 | 0.11499190E 05 0.20987653E 05 -0.10838505E 01 | 0.10121088E 03 0.43833625E 03 0.21665000E 03 | -0.89483010E 02 0.33747307E 00 | 0.11653972E 03 0.65480563E-03 |
| 1763.25 145.50 | -0.92918235E 01 0.17271947E 04 0.15214724E 07 | -0.13930655E 02 0.36073213E 02 0.34151758E 00 | 0.11448517E 05 0.21155418E 05 -0.10830469E 01 | 0.10077140E 03 0.44184010E 03 0.21665000E 03 | -0.89503741E 02 0.34017067E 00 | 0.11633386E 03 0.66003983E-03 |
| 1763.75 146.00 | -0.92918252E 01 0.17258499E 04 0.15268826E 07 | -0.13930652E 02 0.36045125E 02 0.34004251E 00 | 0.11398377E 05 0.21322740E 05 -0.10822036E 01 | 0.10033615E 03 0.44533470E 03 0.21665000E 03 | -0.89523602E 02 0.34286114E 00 | 0.11612091E 03 0.66526022E-03 |
| 1764.25 146.50 | -0.92918267E 01 0.17245770E 04 0.15323436E 07 | -0.13930645E 02 0.36018540E 02 0.33858076E 00 | 0.11348237E 05 0.21491388E 05 -0.10814055E 01 | 0.99904837E 02 0.44885699E 03 0.21665000E 03 | -0.89542595E 02 0.34557293E 00 | 0.11590431E 03 0.67052196E-03 |
| 1764.75 147.00 | -0.92918282E 01 0.17232578E 04 0.15377480E C7 | -0.13930645E 02 0.35990989E 02 0.33713275E 00 | 0.11298555E 05 0.21659818E 05 -0.10805783E 01 | 0.99477572E 02 0.45237472E 03 0.21665000E 03 | -0.89560774E 02 0.34828122E 00 | 0.11567240E 0 0.67577689E-0 |
| 1765.25 147.50 | -0.92918293E 01 0.17219951E 04 0.15431871E 07 | -0.13930642E 02 0.35964617E 02 0.33569834E 00 | 0.11248949E 05 0.21829308E 05 -0.10797865E 01 | 0.99054322E 02 0.45591459E 03 0.21665000E 03 | -0.89578176E 02 0.35100655E 00 | 0.11544041E 03 0.68106490E-03 |
| 1765.75 148.00 | -0.92918310E 01 0.17207649E 04 0.15486412E 07 | -0.13930638E 02 0.35938922E 02 0.33427706E 00 | 0.11199495E 05 0.21999602E 05 -0.10790151E 01 | 0.98634945E 02 0.45947125E 03 0.21665000E 03 | -0.89594824E 02 0.35374481E 00 | 0.11519652E 03 0.68637801E-03 |
| 1766.25 148.50 | -0.92918323E 01 0.17195303E 04 0.15540750E 07 | -0.13930635E 02 0.35913138E 02 0.33286927E 00 | 0.11150346E 05 0.22170162E 05 -0.10782409E 01 | 0.98219550E 02 0.46303347E 03 0.21665000E 03 | -0.89610743E 02 0.35648734E 00 | 0.11495197E 0 0.69169940E-0 |
| 1766.75 149.00 | -0.92918335E 01 0.17183670E 04 0.155956C1E 07 | -0.13930632E 02 0.35888842E 02 0.33147416E 00 | 0.11101197E 05 0.22342050E 05 -0.10775115E 01 | 0.97807895E 02 0.46662342E 03 0.21665000E 03 | -0.89625939E 02 0.35925123E 00 | 0.11469116E 0 0.69706223E-0 |
| 1767.25 149.50 | -0.92918347E 01 0.17171528E 04 0.15649847E 07 | -0.13930632E 02 0.35863482E 02 0.33009176E 00 | 0.11052505E 05 0.22513655E 05 -0.10767501E 01 | 0.97399992E 02 0.47020746E 03 0.21665000E 03 | -0.89640512E 02 0.36201057E 00 | 0-11442924E 0 0-70241623E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec Geodetic latitude, deg Dynamic pressure, N/m ² | | Longitude, deg Dynamic | Altitude m Atmospheric | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|---|---|--|--|---|
| | Dynamic pressure, N/m ² | pressure, lb/ft ² | pressure, N/m ² Accelerations, g units | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | Reynolds number | Mach number | | Temperature ^O K | | |
| 1767.75 150.00 | -0.92918360E 01 0.17152584E 04 0.15691635E 07 | -0.13930628E 02 0.35823917E 02 0.32864796E 00 | 0.11003737E 05 0.22686845E 05 -0.10755622E 01 | 0.96996195E 02 0.47382462E 03 0.21674932E 03 | -0.89654395E 02 0.36462824E 00 | 0.11415385E 03 0.70749535E-03 |
| 1768-25 150-50 | -0.92918367E 01 0.17117930E 04 0.15704947E 07 | -0.13930625E 02 0.35751542E 02 0.32707532E 00 | 0.10955503E 05 0.22859258E 05 -0.10733892E 01 | 0.96601602E 02 0.47742555E 03 0.21706177E 03 | -0.89667675E 02 0.36687047E 00 | 0.11387145E 03 0.71184598E-03 |
| 1768-75 151-00 | -0.92918377E 01 0.17086414E 04 0.15719693E 07 | -0.13930625E 02 0.35685718E 02 0.32553926E 00 | 0.10907192E 05 0.23033004E 05 -0.10714130E 01 | 0.96217214E 02 0.48105431E 03 0.21737471E 03 | -0.89680402E 02 0.36912675E 00 | 0.11358943E 03 0.71622389E-03 |
| 1769.25 151.50 | -0.92918388E 01 0.17056833E 04 0.15735052E 07 | -0.13930621E 02 0.35623936E 02 0.32403964E 00 | 0.10859262E 05 0.23206441E 05 -0.10695580E 01 | 0.95842352E 02 0.48467662E 03 0.21768519E 03 | -0.89692496E 02 0.37137581E 00 | 0.11329072E 03 0.72058780E-03 |
| 1769.75 152.00 | -0.92918396E 01 0.17029606E 04 0.15751412E 07 | -0.13930618E 02 0.35567071E 02 0.32257237E 00 | 0.10811408E 05 0.23380657E 05 -0.10678508E 01 | 0.95476280E 02 0.48831520E 03 0.21799518E 03 | -0.89704068E 02 0.37363175E 00 | 0.11298936E 03 0.72496502E-03 |
| 1770.25 152.50 | -0.92918406E 01 0.17004197E 04 0.15768441E 07 | -0.13930614E 02 0.35514004E 02 0.32113589E 00 | 0.10763783E 05 0.23555094E 05 -0.10662575E 01 | 0.95118343E 02 0.49195839E 03 0.21830369E 03 | -0.89715098E 02 0.37588736E 00 | 0.11267219E 03 0.72934163E-03 |
| 1770.75 153.06 | -0.92918414E 01 0.16980472E 04 0.15786083E 07 | -0.13930614E 02 0.35464454E 02 0.31972866E 00 | 0.10716387E 05 0.23729744E 05 -0.10647698E 01 | 0.94768105E 02 0.49560603E 03 0.21861073E 03 | -0.89725647E 02 0.37814253E 00 | 0.11235647E 03 0.73371738E-03 |
| 1771.25 153.56 | -0.92918422E 01 0.16958830E 04 0.15804711E 07 | -0.13930611E 02 0.35419253E 02 0.31834660E 00 | 0.10668914E 05 0.23905723E 05 -0.10634127E 01 | 0.94424807E 02 0.49928142E 03 0.21891827E 03 | -0.89735671E 02 0.38041166E 00 | 0.11203436E 0: 0.73812023E-0: |
| 1771.75 154.00 | -0.92918428E 01 0.16938194E 04 0.15823557E 07 | -0.13930611E 02 0.35376155E 02 0.31699068E 00 | 0.10621823E 05 0.24081335E 05 -0.10621188E 01 | 0.94088116E 02 0.50294916E 03 0.21922334E 03 | -0.89745245E 02 0.38267292E 00 | 0.11169572E 0: 0.74250779E-0: |
| 1772.25 154.50 | -0.92918435£ 01 0.16918933£ 04 0.15842931£ 07 | -0.13930611E 02 0.35335927E 02 0.31565843E 00 | 0.10574884E 05 0.24257420E 05 -0.10609110E 01 | 0.93757643E 02 0.50662677E 03 0.21952743E 03 | -0.89754403E 02 0.38493710E 00 | 0.11135813E 0: 0.74690102E-0: |
| 1772.75 155.00 | -0.92918444E 01 0.16901222E 04 0.15863014E 07 | -0.13930608E 02 0.35298938E 02 0.31434756E 00 | 0.10527944E 05 0.24434551E 05 -0.10598004E 01 | 0.93432930E 02 0.51032621E 03 0.21983152E 03 | -0.89763076E 02 0.38721158E 00 | 0.11100584E 0: 0.75131424E-0: |
| 1773•25 155•50 | -0.92918448E 01 0.16884166E 04 0.15883158E 07 | -0.13930608E 02 0.35263315E 02 0.31305883E 00 | 0.10481386E 05 0.24611276E 05 -0.10587309E 01 | 0.93113699E 02 0.51401720E 03 0.22013315E 03 | -0.89771406E 02 0.38947772E 00 | 0.11064626E 0 0.75571128E-0 |

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|---|---|---|---|---|--|---|
| Elapsed time from entry point, sec Dynamic pressure, N/m ² | Dynamic pressure, N/m ² | 2 pressure, pressure, lb/ft ² Accelera | Atmospheric pressure, N/m ² | Atmospheric pressure, lb/ft ² Temperature | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | Reynolds number | | Accelerations, g units | | | |
| 1773.75 156.00 | -0.92918453E 01 0.16868157E 04 0.15903689E 07 | -0.13930604E 02 0.35229879E 02 0.31179008E 00 | 0.10434980E 05 0.24788458E 05 -0.10577270E 01 | 0.92799635E 02 0.51771771E 03 0.22043380E 03 | -0.89779316E 02 0.39174661E 00 | 0-11029063E 03 0-76011366E-03 |
| 1774-25 156-50 | -0.92918460E 01 0.16853522E 04 0.15924906E 07 | -0.13930604E 02 0.35199313E 02 0.31053866E 00 | 0.10388498E 05 0.24966966E 05 -0.10568093E 01 | 0.92490282E 02 0.52144593E 03 0.22073495E 03 | -0.89786827E 02 0.39402939E 00 | 0.10991794E 03 0.76454297E-03 |
| 1774.75 157.00 | -0.92918464E 01 0.16839072E 04 0.15945926E 07 | -0.13930601E 02 0.35169135E 02 0.30930624E 00 | 0.10342474E 05 0.25144745E 05 -0.10559033E 01 | 0.92185425E 02 0.52515892E 03 0.22103314E 03 | -0.89793996E 02 0.39629974E 00 | 0.10954217E 03 0.76894819E-03 |
| 1775.25 157.50 | -0.92918468£ 01 0.16825440E 04 0.15967229E 07 | -0.13930601E 02 0.35140662E 02 0.30809117E 00 | 0.10296601E 05 0.25322953E 05 -0.10550484E 01 | 0.91884999E 02 0.52888088E 03 0.22133034E 03 | -0.89800822E 02 0.39857251E 00 | 0.10916365E 0: 0.77335809E-0: |
| 1775 .7 5 158 . 00 | -0.92918475E 01 0.16812983E 04 0.15989130E 07 | -0.13930601E 02 0.35114645E 02 0.30689113E 00 | 0.10250653E 05 0.25502486E 05 -0.10542673E 01 | 0.91588634E 02 0.53263050E 03 0.22162804E 03 | -0.89807357E 02 0.40085910E 00 | 0.10877797E 0: 0.7777 94 80E-0: |
| 1776-25 158-50 | -0.92918477E 01 0.16801317E 04 0.16011358E 07 | -0.13930597E 02 0.35090282E 02 0.30570610E 00 | 0.10204780E 05 0.25682752E 05 -0.10535358E 01 | 0.91296128E 02 0.53639544E 03 0.22192526E 03 | -0.89813536E 02 0.40315196E 00 | 0.10838874E 0 0.78224367E-0 |
| 1776.75 159.00 | -0.92918484E 01 0.16789864E 04 0.16033501E 07 | -0.13930597E 02 0.35066361E 02 0.30453604E 00 | 0.10159213E 05 0.25862841E 05 -0.10528176E 01 | 0.91007177E 02 0.54015667E 03 0.22222050E 03 | -0.89819391E 02 0.40543950E 00 | 0.10799180E 0 0.78668223E-0 |
| 1777.25 159.50 | -0.92918485E 01 0.16778499E 04 0.16055449E 07 | -0.13930594E 02 0.35042625E 02 0.30338142E 00 | 0.10114026E 05 0.26042435E 05 -0.10521050E 01 | 0.90721836E 02 0.54390757E 03 0.22251328E 03 | -0.89825010E 02 0.40771774E 00 | 0.10759987E 0 0.79110274E-0 |
| 1777.75 160.00 | -0.92918489E 01 0.16768564E 04 0.16078266E 07 | -0.13930594E 02 0.35021874E 02 0.30223830E 00 | 0.10068535E 05 0.26224264E 05 -0.10514820E 01 | 0.90439844E 02 0.54770515E 03 0.22280803E 03 | -0.89830353E 02 0.41002129E 00 | 0.10720196E 0 0.79557237E-0 |
| 1778.25 160.50 | -0.92918495E 01 0.16758739E 04 0.16100950E 07 | -0.13930594E 02 0.35001355E 02 0.30110880E 00 | 0.10023348E 05 0.26405892E 05 -0.10508659E 01 | 0.90161044E 02 0.55149854E 03 0.22310082E 03 | -0.89835409E 02 0.41231926E 00 | 0.10679346E 0 0.80003117E-0 |
| 1778.75 161.00 | -0.92918497E 01 0.16748798E 04 0.16123349E 07 | -0.13930591E 02 0.34980593E 02 0.29999250E 00 | 0.99785424E 04 0.26586997E 05 -0.10502426E 01 | 0.89885214E 02 0.55528100E 03 0.22339114E 03 | -0.89840240E 02 0.41460763E 00 | 0.10639106E 0 0.80447134E-0 |
| 1779.25 161.50 | -0.92918500E 01 0.16739845E 04 0.16146314E 07 | -0.13930591E 02 0.34961894E 02 0.29888695E 00 | 0.99335844E 04 0.26769728E 05 -0.10496812E 01 | 0.89612335E 02 0.55909740E 03 0.22368246E 03 | -0.89844794E 02 0.41691353E 00 | 0.10597333E 0 0.80894552E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| time, sec latitude | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature OK | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--------------------|---|---|---|--|--|---|
| | Dynamic pressure, N/m ² | Dynamic Dynamic pressure, ressure, N/m lb/ft ² | Atmospheric pressure, N/m ² Accelerations, g units | | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | Reynolds number | Mach number | | | | |
| 1779.75 162.00 | -0.92918506E 01 0.16731541E 04 0.16169595E 07 | -0.13930591E 02 0.34944551E 02 0.29779251E 00 | 0.98886263E 04 0.26953479E 05 -0.10491605E 01 | 0.89342324E 02 0.56293513E 03 0.22397377E 03 | -0.89849186E 02 0.41922928E 00 | 0.10556956E 03 0.81343883E-03 |
| 1780.25 162.50 | -0.92918506E 01 0.16722399E 04 0.16192054E 07 | -0.13930591E 02 0.34925457E 02 0.29671137E 00 | 0.98443541E 04 0.27135426E 05 -0.10485872E 01 | 0.89074956E 02 0.56673516E 03 0.22426065E 03 | -0.89853327E 02 0.42151934E 00 | 0.10516326E 03 0.81788225E-03 |
| 1780.75 163.00 | -0.92918509E 01 0.16714633E 04 0.16215413E 07 | -0.13930587E 02 0.34909238E 02 0.29563900E 00 | 0.97997009E 04 0.27319945E 05 -0.10481003E 01 | 0.88810263E 02 0.57058894E 03 0.22455000E 03 | -0.89857266E 02 0.42383879E 00 | 0.10474379E 0: 0.82238274E-0: |
| 1781.25 163.50 | -0.92918512E 01 0.16706780E 04 0.16238551E 07 | -0.13930587E 02 0.34892836E 02 0.29457775E 00 | 0.97553525E 04 0.27504218E 05 -0.10476078E 01 | 0.88548069E 02 0.57443754E 03 0.22483738E 03 | -0.89860970E 02 0.42615218E 00 | 0.10434197E 0: 0.82687146E-0: |
| 1781.75 164.00 | -0.92918512E 01 0.16699117E 04 0.16261690E 07 | -0.13930587E 02 0.34876832E 02 0.29352663E 00 | 0.97111565E 04 0.27688851E 05 -0.10471273E 01 | 0.88288283E 02 0.57829369E 03 0.22512378E 03 | -0.89864552E 02 0.42846714E 00 | 0.10392663E 0: 0.83136321E-0: |
| 1782.25 164.50 | -0.92918515E 01 0.16691670E 04 0.16284845E 07 | -0.13930584E 02 0.34861279E 02 0.29248567E 00 | 0.96671129E 04 0.27873854E 05 -0.10466603E 01 | 0.88030932E 02 0.58215756E 03 0.22540919E 03 | -0.89867930E 02 0.43078379E 00 | 0.10351360E 0 0.83585826E-0 |
| 1782.75 165.00 | -0.92918518E 01 0.16684855E 04 0.16308358E 07 | -0.13930584E 02 0.34847046E 02 0.29145346E 00 | 0.96229932E 04 0.28060180E 05 -0.10462330E 01 | 0.87775875E 02 0.58604906E 03 0.22569510E 03 | -0.89871124E 02 0.43311404E 00 | 0.10312207E 0 0.84037970E-0 |
| 1783.25 165.50 | -0.92918519E 01 0.16677728E 04 0.16331490E 07 | -0.13930584E 02 0.34832160E 02 0.29043169E 00 | 0.95792544E 04 0.28245892E 05 -0.10457861E 01 | 0.87523062E 02 0.58992774E 03 0.22597855E 03 | -0.89874187E 02 0.43543370E 00 | 0.10271324E 0 0.84488057E~0 |
| 1783.75 166.00 | -0.92918520E 01 0.16670733E 04 0.16354600E 07 | -0.13930584E 02 0.34817550E 02 0.28941913E 00 | 0.95356680E 04 0.28431950E 05 -0.10453474E 01 | 0.87272413E 02 0.59381363E 03 0.22626101E 03 | -0.89877128E 02 0.43775475E 00 | 0.10230758E 0: 0.84938416E-0: |
| 1784.25 166.50 | -0.92918522E 01 0.16664326E 04 0.16378047E 07 | -0.13930580E 02 0.34804170E 02 0.28841467E 00 | 0.94920054E 04 0.28619332E 05 -0.10449457E 01 | 0.87023890E 02 0.59772718E 03 0.22654397E 03 | -0.89879869E 02 0.44008942E 00 | 0.10192145E 0: 0.85391415E-0: |
| 1784.75 167.00 | -0.92918524E 01 0.16657691E 04 0.16401203E 07 | -0.13930580E 02 0.34790312E 02 0.28741947E 00 | 0.94486476E 04 0.28806393E 05 -0.10445297E 01 | 0.86777370E 02 0.60163403E 03 0.22682495E 03 | -0.89882480E 02 0.44241719E 00 | 0.10153396E 0 0.85843077E-0 |
| 1785.25 167.50 | -0.92918525E 01 0.16651490E 04 0.16424578E 07 | -0.13930580E 02 0.34777360E 02 0.28643253E 00 | 0.94052898E 04 0.28994448E 05 -0.10441408E 01 | 0.86532945E 02 0.60556165E 03 0.22710595E 03 | -0.89884975E 02 0.44475443E 00 | 0.10115320E 0 0.86296578E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Elapsed time | Geodetic latitude, deg Dynamic pressure, N/m ² | Longitude, deg Dynamic pressure, lb/ft ² | Altitude m Atmospheric pressure, N/m ² | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² | Earth relative flight-path angle, deg Atmospheric density, | Earth relative heading angle, deg Atmospheric density, |
|-------------------|---|---|--|--|---|---|
| ··- | Reynolds number | Reynolds Mach | Accelerations, g units | Temperature OK | kg/m ³ | slug/ft ³ |
| 1785.75 168.00 | -0.92918527E 01 0.16645506E 04 0.16448017E 07 | -0.13930580E 02 0.34764862E 02 0.28545362E 00 | 0.93620082E 04 0.29183160E 05 -0.10437656E 01 | 0.86290449E 02 0.60950299E 03 0.22738645E 03 | -0.89887350E 02 0.44709694E 00 | 0.10077158E 03 0.86751098E-03 |
| 1786.25 168.50 | -0.92918528E 01 0.16639318E 04 0.16471178E 07 | -0.13930580E 02 0.34751940E 02 0.28448389E 00 | 0.93190314E 04 0.29371532E 05 -0.10433776E 01 | 0.86049961E 02 0.61343723E 03 0.22766498E 03 | -0.89889586E 02 0.44943235E 00 | 0.10039246E 03 0.87204243E-03 |
| 1786.75 169.00 | -0.92918530E 01 0.16633463E 04 0.16494507E 07 | -0.13930577E 02 0.34739710E 02 0.28352136E 00 | 0.92760546E 04 0.29560892E 05 -0.10430104E 01 | 0.85811262E 02 0.61739207E 03 0.22794351E 03 | -0.89891743E 02 0.45177714E 00 | 0.10001124E 0: 0.87659206E-0 |
| 1787.25 169.50 | -0.92918532E 01 0.16628121E 04 0.16518143E 07 | -0.13930577E 02 0.34728554E 02 0.28256593E 00 | 0.92330016E 04 0.29751578E 05 -0.10426755E 01 | 0.85574419E 02 0.62137465E 03 0.22822254E 03 | -0.89893786E 02 0.45413546E 00 | 0.99656793E 0 0.88116797E-0 |
| 1787.75 170.00 | -0.92918533E 01 0.16622384E 04 0.16541357E 07 | -0.13930577E 02 0.34716571E 02 0.28161944E 00 | 0.91903296E 04 0.29941564E 05 -0.10423157E 01 | 0.85339437E 02 0.62534258E 03 0.22849911E 03 | -0.89895726E 02 0.45648227E 00 | 0.99305738E 0 0.88572151E-0 |
| 1788.25 170.50 | -0.92918532E 01 0.16616653E 04 0.16564487E 07 | -0.13930577E 02 0.34704603E 02 0.28068043E 00 | 0.91478099E 04 0.30131846E 05 -0.10419564E 01 | 0.85106162E 02 0.62931670E 03 0.22877469E 03 | -0.89897557E 02 0.45882990E 00 | 0.98948843E 0 0.89027668E-0 |
| 1788.75 171.00 | -0.92918534E 01 0.16611423E 04 0.16587918E 07 | -0.13930577E 02 0.34693679E 02 0.27974821E 00 | 0.91052141E 04 0.30323454E 05 -0.10416284E 01 | 0.84874665E 02 0.63331851E 03 0.22905077E 03 | -0.89899286E 02 0.46119102E 00 | 0.98622289E 0 0.89485801E-0 |
| 1789.25 171.50 | -0.92918535E 01 0.16605915E 04 0.16611031E 07 | -0.13930574E 02 0.34682175E 02 0.27882409E 00 | 0.90629231E 04 0.30514668E 05 -0.10412830E 01 | 0.84644896E 02 0.63731211E 03 0.22932488E 03 | -0.89900955E 02 0.46354448E 00 | 0.98298892E 0 0.89942448E-0 |
| 1789.75 172.00 | -0.92918538E 01 0.16600745E 04 0.16634320E 07 | -0.13930574E 02 0.34671378E 02 0.27790688E 00 | 0.90206321E 04 0.30706862E 05 -0.10409589E 01 | 0.84416856E 02 0.64132616E 03 0.22959899E 03 | -0.89902562E 02 0.46590717E 00 | 0.97979686E (0.90400884E-0 |
| 1790.25 172.50 | -0.92918537E 01 0.16595602E 04 0.16657533E 07 | -0.13930574E 02 0.34660636E 02 0.27699705E 00 | 0.89784935E 04 0.30899336E 05 -0.10406363E 01 | 0.8419 0 517E 02 0.6453 4 607E 03 0.2298 7 212E 03 | -0.89904055E 02 0.46827051E 00 | 0.97659330E (0.90859447E-(|
| 1790.75 173.00 | -0.92918538£ 01 0.16590402E 04 0.16680632E 07 | -0.13930570E 02 0.34649776E 02 0.27609387E 00 | 0.89365073E 04 0.31092084E 05 -0.10403103E 01 | 0.83965663E 02 0.64937170E 03 0.23014426E 03 | -0.89905471E 02 0.47063437E 00 | 0.97359021E (0.91318112E-(|
| 1791.25 173.50 | -0.92918539E 01 0.16585708E 04 0.16704040E 07 | -0.13930574E 02 0.34639972E 02 0.27519723E 00 | 0.88944449E 04 0.31286166E 05 -0.10400159E 01 | 0.83742536E 02 0.65342517E 03 0.23041690E 03 | -0.89906832E 02 0.47301178E 00 | 0.97067067E |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|---|---|---|---|---|---|---|
| | Dynamic pressure, N/m ² | pressure, N/m ² lb/ft ² | Atmospheric pressure, N/m ² Accelerations, | pressure, N/m ² pressure, lb/ft ² | | Atmospheric density, slug/ft ³ |
| | Reynolds number | Mach number | g units | Temperature OK | | |
| 1791.75 174.00 | -0.92918540E 01 0.16580670E 04 0.16727091E 07 | -0.13930570E 02 0.34629450E 02 0.27430783E 00 | 0.88526874E 04 0.31479810E 05 -0.10397000E 01 | 0.83520904E 02 0.65746951E 03 0.23068757E 03 | -0.89908134E 02 0.47538104E 00 | 0.96768234E 02 0.92239118E-03 |
| 1792-25 174-50 | -0.92918540E 01 0.16575814E 04 0.16750197E 07 | -0.13930570E 02 0.34619308E 02 0.27342530E 00 | 0.88110060E 04 0.31674072E 05 -0.10393955E 01 | 0.83300931E 02 0.66152676E 03 0.23095774E 03 | -0.89909392E 02 0.47775508E 00 | 0.96475275E 02 0.92699757E-03 |
| 1792.75 175.00 | -0.92918541E 01 0.16571100E 04 0.16773335E 07 | -0.13930570E 02 0.34609463E 02 0.27254928E 00 | 0.87694008E 04 0.31868947E 05 -0.10390999E 01 | 0.83082508E 02 0.66559681E 03 0.23122743E 03 | -0.89910553E 02 0.48013382E 00 | 0.96210579E 02 0.93161310E-03 |
| 1793.25 175.50 | -0.92918543E 01 0.16566482E 04 0.16796480E 07 | -0.13930570E 02 0.34599817E 02 0.27167930E 00 | 0.87278717E 04 0.32064437E 05 -0.10388103E 01 | 0.82865503E 02 0.66967970E 03 0.23149663E 03 | -0.89911687E 02 0.48251731E 00 | 0.95972069E 0: 0.93623782E-0: |
| 1793.75 176.00 | -0.92918544E 01 0.16561844E 04 0.16819528E 07 | -0.13930570E 02 0.34590131E 02 0.27081594E 00 | 0.86864951E 04 0.32260172E 05 -0.10385195E 01 | 0.82650006E 02 0.67376771E 03 0.23176484E 03 | -0.89912761E 02 0.48490098E 00 | 0.95696846E 0 0.94086291E-0 |
| 1794.25 176.50 | -0.92918545E 01 0.16557340E 04 0.16842605E 07 | -0.13930567E 02 0.34580724E 02 0.26995883E 00 | 0.86451947E 04 0.32456518E 05 -0.10382371E 01 | 0.82435997E 02 0.67786848E 03 0.23203256E 03 | -0.89913775E 02 0.48728936E 00 | 0.95451665E 0 0.94549712E-0 |
| 1794.75 177.00 | -0.92918545E 01 0.16552814E 04 0.16865583E 07 | -0.13930567E 02 0.34571272E 02 0.26910819E 00 | 0.86040468E 04 0.32653101E 05 -0.10379533E 01 | 0.82223463E 02 0.68197421E 03 0.23229930E 03 | -0.89914725E 02 0.48967786E 00 | 0.95238073E 0 0.95013158E-0 |
| 1795.25 177.50 | -0.92918545E 01 0.16548381E 04 0.16888569E 07 | -0.13930567E 02 0.34562012E 02 0.26826341E 00 | 0.85629750E 04 0.32850279E 05 -0.10376753E 01 | 0.82012304E 02 0.68609236E 03 0.23256555E 03 | -0.89915655E 02 0.49207084E 00 | 0.94980169E 0 0.95477472E-0 |
| 1795.75 178.00 | -0.92918545E 01 0.16543937E 04 0.16911464E 07 | -0.13930567E 02 0.34552732E 02 0.26742505E 00 | 0.85220555E 04 0.33047691E 05 -0.10373967E 01 | 0.81802619E 02 0.69021539E 03 0.23283081E 03 | -0.89916522E 02 0.49446393E 00 | 0.94791356E 0 0.95941809E-0 |
| 1796.25 178.50 | -0.92918544E 01 0.16539481E 04 0.16934265E 07 | -0.13930567E 02 0.34543425E 02 0.26659309E 00 | 0.84812886E 04 0.33245322E 05 -0.10371172E 01 | 0.81594396E 02 0.69434299E 03 0.23309509E 03 | -0.89917400E 02 0.49685694E 00 | 0.94567490E 0 0.96406130E-0 |
| 1796.75 179.00 | -0.92918545£ 01 0.16535259E 04 0.16957193E 07 | -0.13930563E 02 0.34534607E 02 0.26576647E 00 | 0.84405215E 04 0.33443912E 05 -0.10368525E 01 | 0.81387497E 02 0.69849064E 03 0.23335937E 03 | -0.89918201E 02 0.49925885E 00 | 0.94365769E 0 0.96872176E-0 |
| 1797.25 179.50 | -0.92918546E 01 0.16530987E 04 0.16980009E 07 | -0.13930567E 02 0.34525685E 02 0.26494582E 00 | 0.83999070E 04 0.33642718E 05 -0.10365846E 01 | 0.81181946E 02 0.70264279E 03 0.23362267E 03 | -0.89918978E 02 0.50166065E 00 | 0.94192455E 0 0.97338203E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| (7 | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|---|---|--|--|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² | Dynamic pressure, lb/ft ² | Atmospheric pressure, N/m ² Accelerations, | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | Reynolds number | Mach number | g units | Temperature ^O K | | |
| 1797.75 180.00 | -0.92918546E 01 0.16526958E 04 0.17002954E 07 | -0.13930563E 02 0.34517271E 02 0.26413053E 00 | 0.83592924E 04 0.33842479E 05 -0.10363320E 01 | 0.80977724E 02 0.70681489E 03 0.23388597E 03 | -0.89919683E 02 0.50407127E 00 | 0.94006715E 02 0.97805940E-03 |
| 1798.25 180.50 | -0.92918545E 01 0.16522607E 04 0.17025555E 07 | -0.13930563E 02 0.34508182E 02 0.26332187E 00 | 0.83189825E 04 0.34041693E 05 -0.10360591E 01 | 0.80774891E 02 0.71097557E 03 0.23414729E 03 | -0.89920424E 02 0.50647260E 00 | 0.93818303E 02 0.98271875E-03 |
| 1798.75 181.00 | -0.92918545E 01 0.16518650E 04 0.17048412E 07 | -0.13930563E 02 0.34499919E 02 0.26251820E 00 | 0.82785966E 04 0.34242241E 05 -0.10358110E 01 | 0.80573375E 02 0.71516409E 03 0.23440912E 03 | -0.89921085E 02 0.50888730E 00 | 0.93655424E 02 0.98740404E-03 |
| 1799.25 181.50 | -0.92918547E 01 0.16514624E 04 0.17071146E 07 | -0.13930563E 02 0.34491509E 02 0.26172018E 00 | 0.82383629E 04 0.34442979E 05 -0.10355585E 01 | 0.80373124E 02 0.71935658E 03 0.23466996E 03 | -0.89921699E 02 0.51130158E 00 | 0.93476605E 0: 0.99208852E-0: |
| 1799.75 182.00 | -0.92918547E 01 0.16510699E 04 0.17093895E 07 | -0.13930563E 02 0.34483312E 02 0.26092765E 00 | 0.81982056E 04 0.34644291E 05 -0.10353124E 01 | 0.80174179E 02 0.72356107E 03 0.23493031E 03 | -0.89922348E 02 0.51372010E 00 | 0.93328429E 0 0.99678122E-0 |
| 1800-25 182-50 | -0.92918547E 01 0.16506891E 04 0.17116664E 07 | -0.13930563E 02 0.34475359E 02 0.26014069E 00 | 0.81581244E 04 0.34846177E 05 -0.10350737E 01 | 0.79976566E 02 0.72777757E 03 0.23519017E 03 | -0.89922934E 02 0.51614286E 00 | 0.93170170E 0 0.10014821E-0 |
| 1800.75 183.00 | -0.92918547E 01 0.16502990E 04 0.17139297E 07 | -0.13930563E 02 0.34467212E 02 0.25935907E 00 | 0.81181956E 04 0.35048238E 05 -0.10348290E 01 | 0.79780139E 02 0.73199770E 03 0.23544904E 03 | -0.89923482E 02 0.51856501E 00 | 0.93029804E 0 0.10061819E-0 |
| 1801.25 183.50 | -0.92918547E 01 0.16499013E 04 0.17161803E 07 | -0.13930560E 02 0.34458906E 02 0.25858285E 00 | 0.80784192E 04 0.35250474E 05 -0.10345797E 01 | 0.79584920E 02 0.73622147E 03 0.23570693E 03 | -0.89924044E 02 0.52098659E 00 | 0.92912544E 0 0.10108805E-0 |
| 1801.75 184.00 | -0.92918547E 01 0.16495293E 04 0.17184451E 07 | -0.13930560E 02 0.34451136E 02 0.25781175E 00 | 0.80386428E 04 0.35453657E 05 -0.10343464E 01 | 0.79390993E 02 0.74046505E 03 0.23596482E 03 | -0.89924597E 02 0.52341686E 00 | 0.92785048E 0 0.10155960E-0 |
| 1802.25 184.50 | -0.92918547E 01 0.16491513E 04 0.17206979E 07 | -0.13930560E 02 0.34443242E 02 0.25704611E 00 | 0.79990188E 04 0.35657003E 05 -0.10341094E 01 | 0.79198299E 02 0.74471202E 03 0.23622173E 03 | -0.89925052E 02 0.52584645E 00 | 0.92637406E 0 0.10203102E-0 |
| 1802.75 185.00 | -0.92918547E 01 0.16487793E 04 0.17229500E 07 | -0.13930560E 02 0.34435472E 02 0.25628538E 00 | 0.79594709E 04 0.35860910E 05 -0.10338761E 01 | 0.79006754E 02 0.74897070E 03 0.23647815E 03 | -0.89925546E 02 0.52828008E 00 | 0.92508887E (0.10250322E-(|
| 1803.25 185.50 | -0.92918549E 01 0.16484474E 04 0.17252285E 07 | -0.13930560E 02 0.34428540E 02 0.25552939E 00 | 0.79198470E 04 0.36066150E 05 -0.10336680E 01 | 0.78816482E 02 0.75325722E 03 0.23673506E 03 | -0.89926024E 02 0.53072697E 00 | 0.92410501E (0.10297800E-(|

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|---|---|--|---|--|---|---|
| | Dynamic pressure, N/m ² | by pressure, N/m ² pressure, N/m ² pressure, N/m ² $\frac{1b}{t^2}$ | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ | |
| | Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | | siug/it |
| 1803.75 186.00 | -0.92918549E 01 0.16480767E 04 0.17274686E 07 | -0.13930560E 02 0.34420798E 02 0.25477899E 00 | 0.78805278E 04 0.36270757E 05 -0.10334355E 01 | 0.78627328E 02 0.75753053E 03 0.23699000E 03 | -0.89926497E 02 0.53316366E 00 | 0.92327930E 02 0.10345079E-02 |
| 1804.25 186.50 | -0.92918547E 01 0.16477000E 04 0.17296966E 07 | -0.13930560E 02 0.34412930E 02 0.25403388E 00 | 0.78413610E 04 0.36475503E 05 -0.10331993E 01 | 0.78439371E 02 0.76180675E 03 0.23724396E 03 | -0.89926928E 02 0.53559940E 00 | 0.92224899E 02 0.10392340E-02 |
| 1804.75 187.00 | -0.92918547E 01 0.16473424E 04 0.17319356E 07 | -0.13930556E 02 0.34405463E 02 0.25329315E 00 | 0.78021942E 04 0.36681191E 05 -0.10329751E 01 | 0.78252502E 02 0.76610263E 03 0.23749792E 03 | -0.89927295E 02 0.53804372E 00 | 0.92134010E 02 0.10439768E-02 |
| 1805.25 187.50 | -0.92918549E 01 0.16469933E 04 0.17341749E 07 | -0.13930556E 02 0.34398170E 02 0.25255736E 00 | 0.77631036E 04 0.36887414E 05 -0.10327562E 01 | 0.78066812E 02 0.77040968E 03 0.23775138E 03 | -0.89927745E 02 0.54049180E 00 | 0.92024868E 02 0.10487269E-02 |
| 1805.75 188.00 | -0.92918551E 01 0.16466667E 04 0.17364269E 07 | -0.13930556E 02 0.34391349E 02 0.25182617E 00 | 0.77240130E 04 0.37094576E 05 -0.10325514E 01 | 0.77882280E 02 0.77473634E 03 0.23800485E 03 | -0.89928109E 02 0.54294837E 00 | 0.91934030E 02 0.10534934E-02 |
| 1806.25 188.50 | -0.92918551E 01 0.16463175E 04 0.17386534E 07 | -0.13930556E 02 0.34384056E 02 0.25110021E 00 | 0.76851510E 04 0.37301464E 05 -0.10323324E 01 | 0.77698861E 02 0.77905730E 03 0.23825685E 03 | -0.89928464E 02 0.54539911E 00 | 0.91859839E 02 0.10582486E-02 |
| 1806.75 189.00 | -0.92918547E 01 0.16459591E 04 0.17408665E 07 | -0.13930556E 02 0.34376571E 02 0.25037908E 00 | 0.76464413E 04 0.37508474E 05 -0.10321077E 01 | 0.77516520E 02 0.78338078E 03 0.23850785E 03 | -0.89928862E 02 0.54784872E 00 | 0.91800982E 02 0.10630016E-02 |
| 1807.25 189.50 | -0.92918550E 01 0.16456504E 04 0.17431159E 07 | -0.13930556E 02 0.34370123E 02 0.24966181E 00 | 0.76075793E 04 0.37717229E 05 -0.10319141E 01 | 0.77335278E 02 0.78774073E 03 0.23875985E 03 | -0.89929205E 02 0.55031637E 00 | 0.91711778E 02 0.10677897E-02 |
| 1807.75 190.00 | -0.92918551E 01 0.16453059E 04 0.17453283E 07 | -0.13930553E 02 0.34362929E 02 0.24894999E 00 | 0.75690222E 04 0.37925285E 05 -0.10316981E 01 | 0.77155150E 02 0.79208607E 03 0.23900987E 03 | -0.89929530E 02 0.55277318E 00 | 0.91639924E 02 0.10725567E-02 |
| 1808-25 190-50 | -0.92918550E 01 0.16449514E 04 0.17475265E 07 | -0.13930556E 02 0.34355526E 02 0.24824287E 00 | 0.75306174E 04 0.38133439E 05 -0.10314758E 01 | 0.76976069E 02 0.79643345E 03 0.23925891E 03 | -0.89929850E 02 0.55522854E 00 | 0.91579453E 02 0.10773208E-02 |
| 1808.75 191.00 | -0.92918551E 01 0.16446504E 04 0.17497632E 07 | -0.13930553E 02 0.34349239E 02 0.24753976E 00 | 0.74920602E 04 0.38343355E 05 -0.10312871E 01 | 0.76798142E 02 0.80081765E 03 0.23950894E 03 | -0.89930200E 02 0.55770215E 00 | 0.91495880E 02 0.10821205E-02 |
| 1809.25 191.50 | -0.92918550E 01 0.16443084E 04 0.17519598E 07 | -0.13930553E 02 0.34342095E 02 0.24684162E 00 | 0.74538078E 04 0.38552535E 05 -0.10310726E 01 | 0.76621196E 02 0.80518645E 03 0.23975700E 03 | -0.89930468E 02 0.56016450E 00 | 0.91461482E 02 0.10868982E-02 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Reynolds number | Longitude, deg Dynamic pressure, lb/ft ² Mach number | Altitude m Atmospheric pressure, N/m ² Accelerations, g units | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature OK | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|--|---|---|--|---|--|
| 1809.75 192.00 | -0.92918550E 01 0.16440144E 04 0.17541926E 07 | -0.13930553E 02 0.34335955E 02 0.24614704E 00 | 0.74154030E 04 0.38763482E 05 -0.10308882E 01 | 0.76445269E 02 0.80959219E 03 0.24000605E 03 | -0.89930795E 02 0.56264510E 00 | 0.91391201E 02 0.10917114E-02 |
| 1810.25 192.50 | -0.92918550E 01 0.16436991E 04 0.17564003E 07 | -0.13930553E 02 0.34329371E 02 0.24545752E 00 | 0.73772267E 04 0.38974100E 05 -0.10306906E 01 | 0.76270431E 02 0.81399101E 03 0.24025362E 03 | -0.89931064E 02 0.56511923E 00 | 0.91335571E 0: 0.10965120E-0: |
| 1810.75 193.00 | -0.92918552E 01 0.16433874E 04 0.17586059E 07 | -0.13930553E 02 0.34322860E 02 0.24477216E 00 | 0.73391268E 04 0.39185225E 05 -0.10304951E 01 | 0.76096570E 02 0.81840046E 03 0.24050070E 03 | -0.89931349E 02 0.56759681E 00 | 0.91285717E 0: 0.11013193E-0 |
| 1811-25 193-50 | -0.92918551E 01 0.16430676E 04 0.17607986E 07 | -0.13930553E 02 0.34316182E 02 0.24409144E 00 | 0.73011792E 04 0.39396423E 05 -0.10302946E 01 | 0.75923756E 02 0.82281142E 03 0.24074679E 03 | -0.89931643E 02 0.57007267E 00 | 0.91247844E 0. 0.11061232E-0. |
| 1811.75 194.00 | -0.92918551E 01 0.16427511E 04 0.17629889E 07 | -0.13930553E 02 0.34309570E 02 0.24341480E 00 | 0.72633078E 04 0.39608122E 05 -0.10300961E 01 | 0.75751899E 02 0.82723284E 03 0.24099239E 03 | -0.89931911E 02 0.57255190E 00 | 0.91212389E 0 0.11109337E-0 |
| 1812.25 194.50 | -0.92918553E 01 0.16424841E 04 0.17652158E 07 | -0.13930550E 02 0.34303994E 02 0.24274174E 00 | 0.72252840E 04 0.39821595E 05 -0.10299286E 01 | 0.75581081E 02 0.83169131E 03 0.24123898E 03 | -0.89932167E 02 0.57504934E 00 | 0.91188808E 0 0.11157796E-0 |
| 1812.75 195.00 | -0.92918551E 01 0.16421497E 04 0.17673790E 07 | -0.13930553E 02 0.34297010E 02 0.24207404E 00 | 0.71877173E 04 0.40033426E 05 -0.10297190E 01 | 0.75411231E 02 0.83611551E 03 0.24148261E 03 | -0.89932415E 02 0.57752505E 00 | 0.91121140E 0 0.11205832E-0 |
| 1813.25 195.50 | -0.92918552E 01 0.16418654E 04 0.17695793E 07 | -0.13930550E 02 0.34291073E 02 0.24140989E 00 | 0.71499984E 04 0.40247031E 05 -0.10295407E 01 | 0.75242418E 02 0.84057674E 03 0.24172723E 03 | -0.89932647E 02 0.58001900E 00 | 0.91113482E 0 0.11254223E-0 |
| 1813.75 196.00 | -0.92918552E 01 0.16415691E 04 0.17717642E 07 | -0.13930550E 02 0.34284885E 02 0.24074992E 00 | 0.71124318E 04 0.40460692E 05 -0.10293549E 01 | 0.75074524E 02 0.84503914E 03 0.24197087E 03 | -0.89932934E 02 0.58251105E 00 | 0.91057060E 0 0.11302576E-0 |
| 1814.25 196.50 | -0.92918550E 01 0.16412646E 04 0.17739360E 07 | -0.13930550E 02 0.34278525E 02 0.24009435E 00 | 0.70750176E 04 0.40674401E 05 -0.10291640E 01 | 0.74907623E 02 0.84950254E 03 0.24221352E 03 | -0.89933120E 02 0.58500116E 00 | 0.91006068E 0 0.11350892E-0 |
| 1814.75 197.00 | -0.92918551E 01 0.16409906E 04 0.17761295E 07 | -0.13930550E 02 0.34272801E 02 0.23944213E 00 | 0.70375272E 04 0.40889462E 05 -0.10289921E 01 | 0.74741621E 02 0.85399419E 03 0.24245667E 03 | -0.89933342E 02 0.58750452E 00 | 0.91001993E 0 0.11399466E-0 |
| 1815.25 197.50 | -0.92918553E 01 0.16407230E 04 0.17783229E 07 | -0.13930550E 02 0.34267213E 02 0.23879404E 00 | 0.70001130E 04 0.41105008E 05 -0.10288244E 01 | 0.74576612E 02 0.85849597E 03 0.24269932E 03 | -0.89933585E 02 0.59001102E 00 | 0.90956243E 0 0.11448100E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|--|---|---|--|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² Reynolds | Dynamic pressure, pressure, N/m lb/ft Accelerations Reynolds Mach Accelerations quits | Atmospheric pressure, N/m ² Accelerations, g units | Atmospheric pressure, lb/ft ² Temperature | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| ····- | number | number | | °K | | |
| 1815.75 198.00 | -0.92918551E 01 0.16404251E 04 0.17804860E 07 | -0.13930550E 02 0.34260991E 02 0.23814994E 00 | 0.69629274E 04 0.41320150E 05 -0.10286376E 01 | 0.74412401E 02 0.86298930E 03 0.24294050E 03 | -0.89933850E 02 0.59251031E 00 | 0.90947077E 02 0.11496594E-02 |
| 1816.25 198.50 | -0.92918551E 01 0.16401492E 04 0.17826621E 07 | -0.13930546E 02 0.34255229E 02 0.23750976E 00 | 0.69257418E 04 0.41536209E 05 -0.10284646E 01 | 0.74249201E 02 0.86750179E 03 0.24318168E 03 | -0.89934008E 02 0.59501778E 00 | 0.90895127E 02 0.11545247E-02 |
| 1816.75 199.00 | -0.92918551E 01 0.16398803E 04 0.17848376E 07 | -0.13930550E 02 0.34249612E 02 0.23687370E 00 | 0.68886324E 04 0.41752732E 05 -0.10282959E 01 | 0.74086993E 02 0.87202396E 03 0.24342237E 03 | -0.89934240E 02 0.59752812E 00 | 0.90902226E 02 0.11593956E-02 |
| 1817.25 199.50 | -0.92918550E 01 0.16395814E 04 0.17869833E 07 | -0.13930546E 02 0.34243371E 02 0.23624155E 00 | 0.68517516E 04 0.41968832E 05 -0.10281085E 01 | 0.73925570E 02 0.87653729E 03 0.24366157E 03 | -0.89 9 34425E 02 0.60003112E 00 | 0.90893748E 02 0.11642522E-02 |
| 1817.75 200.00 | -0.92918551E 01 0.16393299E 04 0.17891651E 07 | -0.13930546E 02 0.34238117E 02 0.23561255E 00 | 0.68147184E 04 0.42186738E 05 -0.10279508E 01 | 0.73765075E 02 0.88108836E 03 0.24390177E 03 | -0.89934663E 02 0.60255256E 00 | 0.90835091E 02 0.11691446E-02 |
| 1818-25 200-50 | -0.92918553E 01 0.16390694E 04 0.17913332E 07 | -0.13930546E 02 0.34232677E 02 0.23498770E 00 | 0.67778376E 04 0.42404655E 05 -0.10277875E 01 | 0.73605515E 02 0.88563966E 03 0.24414099E 03 | -0.89934862E 02 0.60507162E 00 | 0.90829104E 02 0.11740324E-02 |
| 1818.75 201.00 | -0.92918551E 01 0.16387832E 04 0.17934736E 07 | -0.13930546E 02 0.34226700E 02 0.23436696E 00 | 0.67411854E 04 0.42622132E 05 -0.10276080E 01 | 0.73446815E 02 0.89018176E 03 0.24437872E 03 | -0.89935008E 02 0.60758317E 00 | 0.90814270E 02 0.11789056E-02 |
| 1819.25 201.50 | -0.92918551E 01 0.16384985E 04 0.17956108E 07 | -0.13930546E 02 0.34220753E 02 0.23374979E 00 | 0.67046094E 04 0.42840056E 05 -0.10274295E 01 | 0.73288952E 02 0.89473318E 03 0.24461596E 03 | -0.89935221E 02 0.61009740E 00 | 0.90791370E 02 0.11837840E-02 |
| 1819.75 202.00 | -0.92918552E 01 0.16382460E 04 0.17977709E 07 | -0.13930546E 02 0.34215480E 02 0.23313587E 00 | 0.66679572E 04 0.43059340E 05 -0.10272712E 01 | 0.73131977E 02 0.89931304E 03 0.24485370E 03 | -0.89935418E 02 0.61262489E 00 | 0.90763962E 02 0.11886881E-02 |
| 1820.25 202.50 | -0.92918551E 01 0.16379859E 04 0.17999183E 07 | -0.13930546E 02 0.34210047E 02 0.23252605E 00 | 0.66314574E 04 0.43278617E 05 -0.10271080E 01 | 0.72975940E 02 0.90389273E 03 0.24509045E 03 | -0.89935586E 02 0.61514985E 00 | 0.90789928E 02 0.11935873E-02 |
| 1820.75 203.00 | -0.92918553E 01 0.16377527E 04 0.18020858E 07 | -0.13930543E 02 0.34205177E 02 0.23191905E 00 | 0.65948813E 04 0.43499264E 05 -0.10269618E 01 | 0.72820660E 02 0.90850105E 03 0.24532770E 03 | -0.89935780E 02 0.61768814E 00 | 0.90745317E 02 0.11985124E-02 |
| 1821-25 203-50 | -0.92918552E 01 0.16374953E 04 0.18042264E 07 | -0.13930546E 02 0.34199802E 02 0.23131618E 00 | 0.65585340E 04 0.43719432E 05 -0.10268004E 01 | 0.72666254E 02 0.91309933E 03 0.24556347E 03 | -0.89935961E 02 0.62021846E 00 | 0.90747596E 02 0.12034221E-02 |

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Reynolds | Longitude, deg Dynamic pressure, lb/ft ² Mach | Altitude m Atmospheric pressure, N/m ² Accelerations, | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|---|--|---|---|---|--|
| | number | number | g units | °K | | |
| 1821.75 204.00 | -0.92918551E 01 0.16372247E 04 0.18063509E 07 | -0.13930543E 02 0.34194150E 02 0.23071690E 00 | 0.65223390E 04 0.43939582E 05 -0.10266307E 01 | 0.72512637E 02 0.91769726E 03 0.24579826E 03 | -0.89936116E 02 0.62274614E 00 | 0.90733793E 02 0.12083266E-02 |
| 1822.25 204.50 | -0.92918555E 01 0.16369990E 04 0.18085106E 07 | -0.13930543E 02 0.34189435E 02 0.23012047E 00 | 0.64859916E 04 0.44161556E 05 -0.10264892E 01 | 0.72359860E 02 0.92233329E 03 0.24603403E 03 | -0.89936328E 02 0.62529235E 00 | 0.90711481E 02 0.12132671E-02 |
| 1822.75 205.00 | -0.92918551E 01 0.16367353E 04 0.18106306E 07 | -0.13930543E 02 0.34183929E 02 0.22952830E 00 | 0.64499490E 04 0.44382567E 05 -0.10263239E 01 | 0.72207943E 02 0.92694920E 03 0.24626783E 03 | -0.89936479E 02 0.62782510E 00 | 0.90680338E 02 0.12181814E-02 |
| 1823.25 205.50 | -0.92918555E 01 0.16365125E 04 0.18127837E 07 | -0.13930543E 02 0.34179275E 02 0.22893861E 00 | 0.64137540E 04 0.44605424E 05 -0.10261841E 01 | 0.72056757E 02 0.93160367E 03 0.24650263E 03 | -0.89936648E 02 0.63037656E 00 | 0.90681504E 02 0.12231320E-02 |
| 1823-75 206-00 | -0.92918552E 01 0.16362533E 04 0.18148981E 07 | -0.13930543E 02 0.34173862E 02 0.22835327E 00 | 0.63778638E 04 0.44827294E 05 -0.10260216E 01 | 0.71906457E 02 0.93623753E 03 0.24673544E 03 | -0.89936828E 02 0.63291431E 00 | 0.90678142E 00 0.12280561E-00 |
| 1824-25 206-50 | -0.92918552E 01 0.16360059E 04 0.18170198E 07 | -0.13930543E 02 0.34168695E 02 0.22777076E 00 | 0.63419736E 04 0.45050058E 05 -0.10258665E 01 | 0.71756862E 02 0.94089005E 03 0.24696826E 03 | -0.89936974E 02 0.63545989E 00 | 0.90703608E 0 0.12329953E-0 |
| 1824.75 207.00 | -0.92918552E 01 0.1635762TE 04 0.18191392E 07 | -0.13930543E 02 0.34163602E 02 0.22719171E 00 | 0.63061595E 04 0.45273244E 05 -0.10257136E 01 | 0.71608095E 02 0.94555138E 03 0.24720059E 03 | -0.89937140E 02 0.63800789E 00 | 0.90663271E 0 0.12379393E-0 |
| 1825.25 207.50 | -0.92918552E 01 0.16355350E 04 0.18212689E 07 | -0.13930543E 02 0.34158859E 02 0.22661580E 00 | 0.62703456E 04 0.45497329E 05 -0.10255712E 01 | 0.71460133E 02 0.95023149E 03 0.24743292E 03 | -0.89937305E 02 0.64056375E 00 | 0.90664257E 0 0.12428984E-0 |
| 1825.75 208.00 | -0.92918552E 01 0.16353114E 04 0.18233962E 07 | -0.13930539E 02 0.34154190E 02 0.22604329E 00 | 0.62346078E 04 0.45721837E 05 -0.10254310E 01 | 0.71312984E 02 0.95492044E 03 0.24766476E 03 | -0.89937494E 02 0.64312204E 00 | 0.90651685E 0 0.12478623E-0 |
| 1826.25 208.50 | -0.92918552E 01 0.16350724E 04 0.18255061E 07 | -0.13930543E 02 0.34149197E 02 0.22547405E 00 | 0.61990224E 04 0.45946275E 05 -0.10252811E 01 | 0.71166542E 02 0.95960793E 03 0.24789561E 03 | -0.89937657E 02 0.64567713E 00 | 0.90669040E 0 0.12528200E-0 |
| 1826.75 209.00 | -0.92918553E 01 0.16348502E 04 0.18276261E 07 | -0.13930539E 02 0.34144557E 02 0.22490789E 00 | 0.61634370E 04 0.46171611E 05 -0.10251418E 01 | 0.71020893E 02 0.96431416E 03 0.24812647E 03 | -0.89937766E 02 0.64824005E 00 | 0.90669530E 0 0.12577929E-0 |
| 1827.25 209.50 | -0.92918552E 01 0.16346151E 04 0.18297302E 07 | -0.13930539E 02 0.34139646E 02 0.22434511E 00 | 0.61280040E 04 0.46396873E 05 -0.10249943E 01 | 0.70875988E 02 0.96901886E 03 0.24835634E 03 | -0.89937914E 02 0.65079978E 00 | 0.90648963E 0 0.12627596E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|--|---|--|---|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² | pressure, N/m ² lb/ft ² pressure, N/m ² Accelerations | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ | |
| | Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | | |
| 1827.75 210.00 | -0.92918552E 01 0.16343809E 04 0.18318305E 07 | -0.13930539E 02 0.34134756E 02 0.22378548E 00 | 0.60926472E 04 0.46622535E 05 -0.10248475E 01 | 0.70731830E 02 0.97373192E 03 0.24858572E 03 | -0.89938100E 02 0.65336167E 00 | 0.90607563E 02 0.12677305E-02 |
| 1828.25 210.50 | -0.92918552E 01 0.16341634E 04 0.18339408E 07 | -0.13930539E 02 0.34130214E 02 0.22322887E 00 | 0.60572903E 04 0.46849093E 05 -0.10247112E 01 | 0.70588446E 02 0.97846368E 03 0.24881510E 03 | -0.89938228E 02 0.65593137E 00 | 0.90604033E 02 0.12727165E-02 |
| 1828.75 211.00 | -0.92918553E 01 0.16339564E 04 0.18360577E 07 | -0.13930539E 02 0.34125890E 02 0.22267485E 00 | 0.60219336E 04 0.47076545E 05 -0.10245813E 01 | 0.70445704E 02 0.98321411E 03 0.24904448E 03 | -0.89938363E 02 0.65850881E 00 | 0.90622304E 02 0.12777176E-02 |
| 1829.25 211.50 | -0.92918553E 01 0.16337265E 04 0.18381482E 07 | -0.13930539E 02 0.34121089E 02 0.22212461E 00 | 0.59868054E 04 0.47303409E 05 -0.10244372E 01 | 0.70303777E 02 0.98795226E 03 0.24927238E 03 | -0.89938516E 02 0.66107725E 00 | 0.90628083E 02 0.12827012E-02 |
| 1829.75 212.00 | -0.92918552E 01 0.16334973E 04 0.18402347E 07 | -0.13930539E 02 0.34116301E 02 0.22157742E 00 | 0.59517534E 04 0.47530663E 05 -0.10242934E 01 | 0.70162567E 02 0.99269856E 03 0.24949980E 03 | -0.89938639E 02 0.66364775E 00 | 0.90607561E 02 0.12876888E-02 |
| 1830.25 212.50 | -0.92918553E 01 0.16332974E 04 0.18423433E 07 | -0.13930539E 02 0.34112127E 02 0.22103287E 00 | 0.59166252E 04 0.47759306E 05 -0.10241681E 01 | 0.70022096E 02 0.99747387E 03 0.24972770E 03 | -0.89938793E 02 0.66623159E 00 | 0.90622230E 02 0.12927023E-02 |
| 1830.75 213.00 | -0.92918556E 01 0.16330954E 04 0.18444468E 07 | -0.13930536E 02 0.34107908E 02 0.22049114E 00 | 0.58815732E 04 0.47988339E 05 -0.10240415E 01 | 0.69882277E 02 0.10022573E 04 0.24995512E 03 | -0.89938938E 02 0.66881751E 00 | 0.90603035E 02 0.12977198E-02 |
| 1831.25 213.50 | -0.92918552E 01 0.16328571E 04 0.18465110E 07 | -0.13930536E 02 0.34102931E 02 0.21995335E 00 | 0.58468260E 04 0.48216258E 05 -0.10238920E 01 | 0.69743258E 02 0.10070175E 04 0.25018056E 03 | -0.89939114E 02 0.67138847E 00 | 0.90626773E 0: 0.13027082E-0: |
| 1831.75 214.00 | -0.92918553E 01 0.16326605E 04 0.18486093E 07 | -0.13930536E 02 0.34098825E 02 0.21941782E 00 | 0.58119264E 04 0.48446067E 05 -0.10237687E 01 | 0.69604933E 02 0.10118172E 04 0.25040699E 03 | -0.89939199E 02 0.67397846E 00 | 0.90620674E 0 0.13077337E-0 |
| 1832.25 214.50 | -0.92918553E 01 0.16324646E 04 0.18507035E 07 | -0.13930536E 02 0.34094734E 02 0.21888527E 00 | 0.57771030E 04 0.48676252E 05 -0.10236459E 01 | 0.69467312E 02 0.10166247E 04 0.25063293E 03 | -0.89939398E 02 0.67657032E 00 | 0.90588122E 0 0.13127627E-0 |
| 1832.75 215.00 | -0.92918553E 01 0.16322552E 04 0.18527813E 07 | -0.13930536E 02 0.34090360E 02 0.21835582E 00 | 0.57424319E 04 0.48906319E 05 -0.10235146E 01 | 0.69330373E 02 0.10214297E 04 0.25085789E 03 | -0.89939517E 02 0.67915852E 00 | 0.90582816E 0 0.13177846E-0 |
| 1833.25 215.50 | -0.92918555E 01 0.16320409E 04 0.18548523E 07 | -0.13930536E 02 0.34085883E 02 0.21782891E 00 | 0.57078372E 04 0.49136751E 05 -0.10233802E 01 | 0.69194008E 02 0.10262424E 04 0.25108235E 03 | -0.89939648E 02 0.68174854E 00 | 0.90592203E 0 0.13228101E-0 |

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Reynolds number Longitude, deg Dynamic pressure, lb/ft ² Mach number | latitude, deg deg Dynamic Dynamic pressure, press lb/ft² According to the pressure | Altitude m Atmospheric pressure, N/m ² | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, |
|---|--|--|--|---|---|---|
| | | Accelerations, g units | Temperature ^O K | | slug/ft ³ | |
| 1833.75 216.00 | -0.92918553E 01 0.16318456E 04 0.18569347E 07 | -0.13930536E 02 0.34081804E 02 0.21730498E 00 | 0.56732424E 04 0.49368071E 05 -0.10232577E 01 | 0.69058428E 02 0.10310736E 04 0.25130681E 03 | -0.89939738E 02 0.68434616E 00 | 0.90583589E 0 0.13278503E-0 |
| 1834.25 216.50 | -0.92918553E 01 0.16316365E 04 0.185900G5E 07 | -0.13930536E 02 0.34077437E 02 0.21678408E 00 | 0.56388000E 04 0.49599249E 05 -0.10231266E 01 | 0.68923512E 02 0.10359019E 04 0.25153029E 03 | -0.89939890E 02 - 0.68693992E 00 | 0.90601878E 0. 0.13328830E-0 |
| 1834.75 217.00 | -0.92918552E 01 0.16314270E 04 0.18610614E 07 | -0.13930536E 02 0.34073062E 02 0.21626595E 00 | 0.56044338E 04 0.49830791E 05 -0.10229952E 01 | 0.68789254E 02 0.10407377E 04 0.25175327E 03 | -0.89940033E 02 0.68953544E 00 | 0.90586093E 0 0.13379192E-0 |
| 1835.25 217.50 | -0.92918552E 01 0.16312298E 04 0.18631303E 07 | -0.13930533E 02 0.34068944E 02 0.21575033E 00 | 0.55700676E 04 0.50063205E 05 -0.10228716E 01 | 0.68655633E 02 0.10455918E 04 0.25197626E 03 | -0.89940180E 02 0.69213843E 00 | 0.90592280E 0 0.13429698E-0 |
| 1835.75 218.00 | -0.92918553E 01 0.16310489E 04 0.18652093E 07 | -0.13930536E 02 0.34065166E 02 0.21523744E 00 | 0.55357014E 04 0.50296504E 05 -0.10227582E 01 | 0.68522720E 02 0.10504644E 04 0.25219925E 03 | -0.89940296E 02 0.69474903E 00 | 0.90631331E 0 0.13480352E-0 |
| 1836.25 218.50 | -0.92918553E 01 0.16308507E 04 0.18672693E 07 | -0.13930533E 02 0.34061027E 02 0.21472727E 00 | 0.55014875E 04 0.50529645E 05 -0.10226339E 01 | 0.68390387E 02 0.10553336E 04 0.25242126E 03 | -0.89940438E 02 0.69735554E 00 | 0.90626093E 0 0.13530927E-0 |
| 1836.75 219.00 | -0.92918555E 01 0.16306514E 04 0.18693245E 07 | -0.13930533E 02 0.34056864E 02 0.21421978E 00 | 0.54673500E 04 0.50763133E 05 -0.10225089E 01 | 0.68258682E 02 0.10602101E 04 0.25264277E 03 | -0.89940519E 02 0.69996365E 00 | 0.90581025E 0 0.13581532E-0 |
| 1837.25 219.50 | -0.92918553E 01 0.16304577E 04 0.18713785E 07 | -0.13930533E 02 0.34052818E 02 0.21371538E 00 | 0.54332886E 04 0.50996977E 05 -0.10223874E 01 | 0.68127739E 02 0.10650940E 04 0.25286379E 03 | -0.89940694E 02 0.70257345E 00 | 0.90576303E 0 0.13632171E-0 |
| 1837.75 220.00 | -0.92918553E 01 0.16302727E 04 0.18734386E 07 | -0.13930533E 02 0.34048954E 02 0.21321315E 00 | 0.53992272E 04 0.51231696E 05 -0.10222715E 01 | 0.67997336E 02 0.10699962E 04 0.25308481E 03 | -0.89940835E 02 0.70519075E 00 | 0.90582224E 0 0.13682955E-0 |
| 1838-25 220-50 | -0.92918553E 01 0.16300877E 04 0.18754942E 07 | -0.13930533E 02 0.34045091E 02 0.21271362E 00 | 0.53652419E 04 0.51466760E 05 -0.10221555E 01 | 0.67867579E 02 0.10749057E 04 0.25330534E 03 | -0.89940957E 02 0.70780955E 00 | 0.90612528E (0.13733768E-(|
| 1838.75 221.00 | -0.92918555E 01 0.16299071E 04 0.18775485E 07 | -0.13930533E 02 0.34041317E 02 0.21221703E 00 | 0.53313329E 04 0.51702175E 05 -0.10220422E 01 | 0.67738541E 02 0.10798224E 04 0.25352538E 03 | -0.89941073E 02 0.71043005E 00 | 0.90615498E (0.13784614E-0 |
| 1839.25 221.50 | -0.92918553E 01 0.16297050E 04 0.18795810E 07 | -0.13930533E 02 0.34037097E 02 0.21172280E 00 | 0.52975764E 04 0.51937397E 05 -0.10219155E 01 | 0.67609974E 02 0.10847351E 04 0.25374443E 03 | -0.89941167E 02 0.71304610E 00 | 0.90620040E (0.13835374E-(|

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, deg Dynamic | Altitude m Atmospheric | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|---|---|--|---|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² | ynamic ure, N/m ² pressure, pressure, N/m ² lb/ft ² Accelerations, | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ | |
| <u> </u> | Reynolds Mach gunits | | Temperature ^O K | | | |
| 1839.75 222.00 | -0.92918552E 01 0.16295222E 04 0.18816257E 07 | -0.13930533E 02 0.34033280E 02 0.21123138E 00 | 0.52638198E 04 0.52173485E 05 -0.10218008E 01 | 0.67482158E 02 0.10896659E 04 0.25396348E 03 | -0.89941292E 02 0.71566952E 00 | 0.90601227E 02 0.13886276E-02 |
| 1840.25 222.50 | -0.92918553E 01 0.16293470E 04 0.18836752E 07 | -0.13930529E 02 0.34029621E 02 0.21074199E 00 | 0.52300632E 04 0.52410446E 05 -0.10216910E 01 | 0.67354843E 02 0.10946149E 04 0.25418254E 03 | -0.89941469E 02 0.71830036E 00 | 0.90588944E 02 0.13937323E-02 |
| 1840.75 223.00 | -0.92918553E 01 0.16291612E 04 0.18857098E 07 | -0.13930533E 02 0.34025740E 02 0.21025560E 00 | 0.51964590E 04 0.52647209E 05 -0.10215745E 01 | 0.67228207E 02 0.10995598E 04 0.25440061E 03 | -0.89941553E 02 0.72092677E 00 | 0.90605473E 02 0.13988284E-02 |
| 1841.25 223.50 | -0.92918555E 01 0.16290171E 04 0.18877785E 07 | -0.13930529E 02 0.34022731E 02 0.20977129E 00 | 0.51627024E 04 0.52885912E 05 -0.10214841E 01 | 0.67102222E 02 0.11045453E 04 0.25461967E 03 | -0.89941643E 02 0.72357239E 00 | 0.90584383E 02 0.14039617E-02 |
| 1841.75 224.00 | -0.92918555E 01 0.16288269E 04 0.18898C19E 07 | -0.13930533E 02 0.34018758E 02 0.20928980E 00 | 0.51292505E 04 0.53123327E 05 -0.10213649E 01 | 0.66976735E 02 0.11095038E 04 0.25483676E 03 | -0.89941760E 02 0.72620151E 00 | 0.90632159E 02 0.14090631E-02 |
| 1842.25 224.50 | -0.92918555E 01 0.16286626E 04 0.18918461E 07 | -0.13930529E 02 0.34015326E 02 0.20881039E 00 | 0.50957226E 04 0.53362154E 05 -0.10212618E 01 | 0.66851837E 02 0.11144918E 04 0.25505434E 03 | -0.89941918E 02 0.72884399E 00 | 0.90571417E 02 0.14141903E-02 |
| 1842.75 225.00 | -0.92918555E 01 0.16284710E 04 0.18938602E 07 | -0.13930529E 02 0.34011324E 02 0.20833392E 00 | 0.50624232E 04 0.53600213E 05 -0.10211416E 01 | 0.66727541E 02 0.11194637E 04 0.25527044E 03 | -0.89942010E 02 0.73147575E 00 | 0.90592988E 02 0.14192968E-02 |
| 1843.25 225.50 | -0.92918553E 01 0.16283066E 04 0.18958958E 07 | -0.13930529E 02 0.34007891E 02 0.20785959E 00 | 0.50290475E 04 0.53839681E 05 -0.10210386E 01 | 0.66603859E 02 0.11244651E 04 0.25548704E 03 | -0.89942175E 02 0.73412084E 00 | 0.90572118E 0: 0.14244291E-02 |
| 1843.75 226.00 | -0.92918553E 01 0.16281153E 04 0.18979020E 07 | -0.13930529E 02 0.34003896E 02 0.20738817E 00 | 0.49959006E 04 0.54078375E 05 -0.10209187E 01 | 0.66480774E 02 0.11294504E 04 0.25570215E 03 | -0.89942291E 02 0.73675517E 00 | 0.90634036E 02 0.14295405E-02 |
| 1844•25 226•50 | -0.92918555E 01 0.16279624E 04 0.18999407E 07 | -0.13930529E 02 0.34000703E 02 0.20691856E 00 | 0.49626012E 04 0.54319020E 05 -0.10208228E 01 | 0.66358257E 02 0.11344763E 04 0.25591826E 03 | -0.89942349E 02 0.73940876E 00 | 0.90582344E 02 0.14346894E-02 |
| 1844.75 227.00 | -0.92918553E 01 0.16277825E 04 0.19019497E 07 | -0.13930529E 02 0.33996945E 02 0.20645181E 00 | 0.49295304E 04 0.54558876E 05 -0.10207099E 01 | 0.66236329E 02 0.11394858E 04 0.25613288E 03 | -0.89942505E 02 0.74205144E 00 | 0.90612805E 03 0.14398170E-03 |
| 1845•25 227•50 | -0.92918553E 01 0.16276227E 04 0.19039760E 07 | -0.13930529E 02 0.33993608E 02 0.20598672E 00 | 0.48963834E 04 0.54800149E 05 -0.10206097E 01 | 0.66114858E 02 0.11445249E 04 0.25634801E 03 | -0.89942589E 02 0.74470754E 00 | 0.90578250E 0: 0.14449707E-0: |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Reynolds number | Longitude, deg Dynamic pressure, lb/ft ² Mach number | Altitude m Atmospheric pressure, N/m ² Accelerations, g units | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature OK | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|--|---|---|---|---|--|
| 1845.75 226.00 | -0.92918553E 01 0.16274528E 04 0.19059872E 07 | -0.13930529E 02 0.33990058E 02 0.20552449E 00 | 0.48633888E 04 0.55041173E 05 -0.10205032E 01 | 0.65994044E 02 0.11495588E 04 0.25656214E 03 | -0.89942709E 02 0.74735864E 00 | 0.90636688E 02 0.14501147E-02 |
| 1846.25 228.50 | -0.92918555E 01 0.16273080E 04 0.19080191E 07 | -0.13930526E 02 0.33987034E 02 0.20506421E 00 | 0.48303180E 04 0.55283619E 05 -0.10204124E 01 | 0.65873785E 02 0.11546224E 04 0.25677678E 03 | -0.89942807E 02 0.75002314E 00 | 0.90643119E 02 0.14552847E-02 |
| 1846.75 229.00 | -0.92918556E 01 0.16271595E 04 0.19100441E 07 | -0.13930529E 02 0.33983933E 02 0.20460614E 00 | 0.47973234E 04 0.55526363E 05 -0.10203193E 01 | 0.65754039E 02 0.11596922E 04 0.25699092E 03 | -0.89942943E 02 0.75268871E 00 | 0.90591640E 02 0.14604567E-02 |
| 1847.25 229.50 | -0.92918551E 01 0.16269523E 04 0.19120110E 07 | -0.13930526E 02 0.33979605E 02 0.20415093E 00 | 0.47647098E 04 0.55767158E 05 -0.10201893E 01 | 0.65634763E 02 0.11647213E 04 0.25720259E 03 | -0.89943070E 02 0.75533067E 00 | 0.90606302E 0: 0.14655830E-0: |
| 1847.75 230.00 | -0.92918555E 01 0.16268186E 04 0.19140416E 07 | -0.13930529E 02 0.33976813E 02 0.20369758E 00 | 0.47317914E 04 0.56011065E 05 -0.10201055E 01 | 0.65516203E 02 0.11698154E 04 0.25741624E 03 | -0.89943172E 02 0.75800458E 00 | 0.90592710E 0 0.14707712E-0 |
| 1848.25 230.50 | -0.92918555E 01 0.16266625E 04 0.19160497E 07 | -0.13930526E 02 0.33973553E 02 0.20324625E 00 | 0.46990254E 04 0.56254697E 05 -0.10200076E 01 | 0.65398039E 02 0.11749038E 04 0.25762890E 03 | -0.89943271E 02 0.76067327E 00 | 0.90634963E 0 0.14759493E-0 |
| 1848.75 231.00 | -0.92918555E 01 0.16265104E 04 0.19180557E 07 | -0.13930526E 02 0.33970376E 02 0.20279755E 00 | 0.46663356E 04 0.56498622E 05 -0.10199123E 01 | 0.65280525E 02 0.11799983E 04 0.25784107E 03 | -0.89943360E 02 0.76334295E 00 | 0.90638534E 0 0.14811294E-0 |
| 1849.25 231.50 | -0.92918556E 01 0.16263501E 04 0.19200529E 07 | -0.13930526E 02 0.33967030E 02 0.20235071E 00 | 0.46337220E 04 0.56742833E 05 -0.10198118E 01 | 0.65163420E 02 0.11850987E 04 0.25805275E 03 | -0.89943476E 02 0.76601358E 00 | 0.90634894E 0 0.14863112E-0 |
| 1849.75 232.00 | -0.92918555E 01 0.16261824E 04 0.19220366E 07 | -0.13930526E 02 0.33963526E 02 0.20190677E 00 | 0.46012607E 04 0.56986755E 05 -0.10197066E 01 | 0.65046994E 02 0.11901931E 04 0.25826344E 03 | -0.89943642E 02 0.76867886E 00 | 0.90595857E 0 0.14914827E-0 |
| 1850.25 232.50 | -0.92918555E 01 0.16260180E 04 0.19240229E 07 | -0.13930526E 02 0.33960093E 02 0.20146436E 00 | 0.45687996E 04 0.57231526E 05 -0.10196035E 01 | 0.64930936E 02 0.11953053E 04 0.25847413E 03 | -0.89943767E 02 0.77135124E 00 | 0.90610400E 0 0.14966680E-0 |
| 1850.75 233.00 | -0.92918556E 01 0.16258829E 04 0.19260320E 07 | -0.13930526E 02 0.33957272E 02 0.20102406E 00 | 0.45362621E 04 0.57477733E 05 -0.10195188E 01 | 0.64815491E 02 0.12004474E 04 0.25868533E 03 | -0.89943810E 02 0.77403713E 00 | 0.90646548E 0 0.15018795E-0 |
| 1851.25 233.50 | -0.92918552E 01 0.16257072E 04 0.19279980E 07 | -0.13930526E 02 0.33953601E 02 0.20058659E 00 | 0.45040295E 04 0.57722475E 05 -0.10194086E 01 | 0.64700589E 02 0.12055590E 04 0.25889454E 03 | -0.89943974E 02 0.77670482E 00 | 0.90628137E 0 0.15070556E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|---|---|---|---|--|--|---|
| | Dynamic pressure, N/m ² | Dynamic pressure, pressure, pressure lb/ft ² | Atmospheric pressure, N/m ² | | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | Reynolds number | Mach number | Accelerations, Tem | Temperature ^O K | | |
| 1851.75 234.00 | -0.92918555E 01 0.16255656E 04 0.19299948E 07 | -0.13930526E 02 0.33950644E 02 0.20015052E 00 | 0.44716446E 04 0.57969225E 05 -0.10193198E 01 | 0.64586133E 02 0.12107125E 04 0.25910474E 03 | -0.89944039E 02 0.77939223E 00 | 0.90606228E 02 0.15122701E-02 |
| 1852.25 234.50 | -0.92918556E 01 0.16254384E 04 0.19320009E 07 | -0.13930522E 02 0.33947989E 02 0.19971661E 00 | 0.44392596E 04 0.58216837E 05 -0.10192401E 01 | 0.64472253E 02 0.12158839E 04 0.25931495E 03 | -0.89944143E 02 0.78208686E 00 | 0.90601668E 02 0.15174985E-02 |
| 1852-75 235-00 | -0.92918555E 01 0.16252691E 04 0.19339629E 07 | -0.13930526E 02 0.33944452E 02 0.19928539E 00 | 0.44071794E 04 0.58462961E 05 -0.10191339E 01 | 0.64358871E 02 0.12210244E 04 0.25952318E 03 | -0.89944302E 02 0.78476315E 00 | 0.90603510E 02 0.15226914E-02 |
| 1853.25 235.50 | -0.92918553E 01 0.16250950E 04 0.19359178E 07 | -0.13930522E 02 0.33940814E 02 0.19885613E 00 | 0.43751754E 04 0.58709344E 05 -0.10190247E 01 | 0.64245941E 02 0.12261702E 04 0.25973092E 03 | -0.89944370E 02 0.78744007E 00 | 0.90602373E 02 0.15278855E-02 |
| 1853.75 236.00 | -0.92918557E 01 0.16249893E 04 0.19379336E 07 | -0.13930526E 02 0.33938607E 02 0.19842834E 00 | 0.43428666E 04 0.58958921E 05 -0.10189584E 01 | 0.64133610E 02 0.12313827E 04 0.25994064E 03 | -0.89944509E 02 0.79014954E 00 | 0.90623579E 02 0.15331427E-02 |
| 1854.25 236.50 | -0.92918556E 01 0.16248528E 04 0.19399172E 07 | -0.13930522E 02 0.33935758E 02 0.19800289E 00 | 0.43107864E 04 0.59207598E 05 -0.10188729E 01 | 0.64021727E 02 0.12365764E 04 0.26014888E 03 | -0.89944587E 02 0.79284707E 00 | 0.90641954E 02 0.15383768E-02 |
| 1854.75 237.00 | -0.92918553E 01 0.16246747E 04 0.19418567E 07 | -0.13930522F 02 0.33932037E 02 0.19758009E 00 | 0.42790110E 04 0.59454743E 05 -0.10187612E 01 | 0.63910342E 02 0.12417381E 04 0.26035514E 03 | -0.89944703E 02 0.79552585E 00 | 0.90667103E 02 0.15435744E-02 |
| 1855.25 237.50 | -0.92918553E 01 0.16245504E 04 0.19438436E 07 | -0.13930522E 02 0.33929441E 02 0.19715884E 00 | 0.42470070E 04 0.59704507E 05 -0.10186833E 01 | 0.63799522E 02 0.12469546E 04 0.26056289E 03 | -0.89944777E 02 0.79823084E 00 | 0.90636265E 02 0.15488230E-02 |
| 1855.75 238.00 | -0.92918555E 01 0.16244187E 04 0.19458222E 07 | -0.13930522E 02 0.33926692E 02 0.19673934E 00 | 0.42150792E 04 · 0.59954528E 05 -0.10186007E 01 | 0.63689089E 02 0.12521764E 04 0.26077014E 03 | -0.89944861E 02 0.80093648E 00 | 0.90666056E 02 0.15540728E-02 |
| 1856.25 238.50 | -0.92918556E 01 0.16242867E 04 0.19477961E 07 | -0.13930522E 02 0.33923933E 02 0.19632200E 00 | 0.41832276E 04 0.60204806E 05 -0.10185179E 01 | 0.63579178E 02 0.12574035E 04 0.26097691E 03 | -0.89944993E 02 0.80364273E 00 | 0.90634555E 02 0.15593238E-02 |
| 185 6. 75 239.00 | -0.92918553E 01 0.16241200E 04 0.19497351E 07 | -0.13930522E 02 0.33920453E 02 0.19590672E 00 | 0.41516046E 04 0.60454117E 05 -0.10184134E 01 | 0.63469635E 02 0.12626105E 04 0.26118219E 03 | -0.89945065E 02 0.80633643E 00 | 0.90658253E 02 0.15645504E-02 |
| 1857-25 239-50 | -0.92918555E 01 0.16239969E 04 0.19517110E 07 | -0.13930522E 02 0.33917881E 02 0.19549329E 00 | 0.41198292E 04 0.60705480E 05 -0.10183362E 01 | 0.63360698E 02 0.12678604E 04 0.26138846E 03 | -0.89945241E 02 0.80905015E 00 | 0.90635223E 02 0.15698159E-02 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² | Dynamic pressure, N/m ² Dynamic pressure, b/ft ² Dynamic pressure, p. | Altitude m Atmospheric pressure, N/m ² | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|--|---|--|--|---|--|
| | | | Accelerations, g units | | kg/m | |
| 1857.75 240.00 | -0.92918555E 01 0.16238560E 04 0.19536667E 07 | -0.13930522E 02 0.33914939E 02 0.19508194E 00 | 0.40882062E 04 0.60956474E 05 -0.10182478E 01 | 0.63252198E 02 0.12731024E 04 0.26159374E 03 | -0.89945302E 02 0.81175774E 00 | 0.90678404E 02 0.15750695E-02 |
| 1858.25 240.50 | -0.92918555E 01 0.16237232E 04 0.19556279E 07 | -0.13930519E 02 0.33912165E 02 0.19467223E 00 | 0.40565832E 04 0.61208314E 05 -0.10181645E 01 | 0.63144119E 02 0.12783623E 04 0.26179903E 03 | -0.89945395E 02 - 0.81447233E 00 | 0.90644180E 02 0.15803367E-02 |
| 1858.75 241.00 | -0.92918555E 01 0.16235712E 04 0.19575683E 07 | -0.13930522E 02 0.33908990E 02 0.19426447E 00 | 0.40251126E 04 0.61459781E 05 -0.10180692E 01 | 0.63036438E 02 0.12836142E 04 0.26200333E 03 | -0.89945487E 02 0.81718080E 00 | 0.90671649E 02 0.15855920E-02 |
| 1859-25 241-50 | -0.92918553E 01 0.16234483E 04 0.19595321E 07 | -0.13930519E 02 0.33906424E 02 0.19385866E 00 | 0.39935658E 04 0.61712694E 05 -0.10179922E 01 | 0.62929338E 02 0.12888964E 04 0.26220812E 03 | -0.89945611E 02 0.81990269E 00 | 0.90646715E 02 0.15908733E-02 |
| 1859.75 242.00 | -0.92918557E 01 0.16233461E 04 0.19615137E 07 | -0.13930519E 02 0.33904290E 02 0.19345427E 00 | 0.39619428E 04 0.61967069E 05 -0.10179281E 01 | 0.62822644E 02 0.12942092E 04 0.26241341E 03 | -0.89945726E 02 0.82263818E 00 | 0.90612810E 02 0.15961810E-02 |
| 1860.25 242.50 | -0.92918555E 01 0.16231749E 04 0.19634250E 07 | -0.13930519E 02 0.33900713E 02 0.19305265E 00 | 0.39307770E 04 0.62218597E 05 -0.10178207E 01 | 0.62716388E 02 0.12994624E 04 0.26261574E 03 | -0.89945774E 02 0.82534096E 00 | 0.90646943E 0: 0.16014253E-0: |
| 1860.75 243.00 | -0.92918553E 01 0.16230480E 04 0.19653731E 07 | -0.13930519E 02 0.33898064E 02 0.19265291E 00 | 0.38994588E 04 0.62472182E 05 -0.10177412E 01 | 0.62610747E 02 0.13047587E 04 0.26281906E 03 | -0.89945896E 02 0.82806372E 00 | 0.90633008E 0: 0.16067083E-0: |
| 1861.25 243.50 | -0.92918556E 01 0.16229495E 04 0.19673492E 07 | -0-13930519E 02 0-33896005E 02 0-19225404E 00 | 0.38679882E 04 0.62727861E 05 -0.10176794E 01 | 0.62505399E 02 0.13100986E 04 0.26302337E 03 | -0.89945996E 02 0.83080689E 00 | 0.90666352E 0: 0.16120309E-0: |
| 1861.75 244.00 | -0.92918557E 01 0.16228197E 04 0.19692917E 07 | -0.13930519E 02 0.33893294E 02 0.19185732E 00 | 0.38367462E 04 0.62982508E 05 -0.10175980E 01 | 0.62400464E 02 0.13154171E 04 0.26322619E 03 | -0.89946097E 02 0.83353682E 00 | 0.90691423E 0 0.16173279E-0 |
| 1862-25 244-50 | -0.92918553E 01 0.16226504E 04 0.19711914E 07 | -0.13930519E 02 0.33889759E 02 0.19146315E 00 | 0.38058090E 04 0.63235505E 05 -0.10174918E 01 | 0.62296016E 02 0.13207010E 04 0.26342704E 03 | -0.89946196E 02 0.83624700E 00 | 0.90647155E 0 0.16225865E-0 |
| 1862.75 245.00 | -0.92918556E 01 0.16225536E 04 0.19731606E 07 | -0.13930519E 02 0.33887736E 02 0.19106963E 00 | 0.37744908E 04 0.63492461E 05 -0.10174311E 01 | 0.62191963E 02 0.13260676E 04 0.26363037E 03 | -0.89946285E 02 0.83899751E 00 | 0.90666175E 0 0.16279234E-0 |
| 1863.25 245.50 | -0.92918555E 01 0.16224165E 04 0.19750861E 07 | -0.13930519E 02 0.33884874E 02 0.19067862E 00 | 0.37434774E 04 0.63747742E 05 -0.10173452E 01 | 0.62088388E 02 0.13313993E 04 0.26383172E 03 | -0.89946367E 02 0.84172794E 00 | 0.90687793E 0 0.16332213E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|---|---|--|--|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² | Dynamic pressure, lb/ft ² | Atmospheric pressure, N/m ² | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | | |
| 1863.75 246.00 | -0.92918555E 01 0.16222933E 04 0.197702C4E 07 | -0.13930519E 02 0.33882301E 02 0.19028950E 00 | 0.37124640E 04 0.64003859E 05 -0.10172679E 01 | 0.61985324E 02 0.13367484E 04 0.26403307E 03 | -0.89946486E 02 0.84446524E 00 | 0.90643557E 02 0.16385325E-02 |
| 1864.25 246.50 | -0.92918555E 01 0.16221638E 04 0.19789469E 07 | -0.13930519E 02 0.33879597E 02 0.18990202E 00 | 0.36815268E 04 0.64260184E 05 -0.10171867E 01 | 0.61882631E 02 0.13421019E 04 0.26423393E 03 | -0.89946555E 02 0.84720270E 00 | 0.90658459E 02 0.16438441E-02 |
| 1864.75 247.00 | -0.92918555E 01 0.16220428E 04 0.19808788E 07 | -0.13930519E 02 0.33877068E 02 0.18951612E 00 | 0.36505896E 04 0.64517337E 05 -0.10171108E 01 | 0.61780346E 02 0.13474726E 04 0.26443479E 03 | -0.89946622E 02 0.84994688E 00 | 0.90665004E 02 0.16491686E-02 |
| 1865-25 247-50 | -0.92918556E 01 0.16219224E 04 0.19828072E 07 | -0.13930519E 02 0.33874554E 02 0.18913224E 00 | 0.36197286E 04 0.64774692E 05 -0.10170353E 01 | 0.61678561E 02 0.13528476E 04 0.26463515E 03 | -0.89946754E 02 0.85269117E 00 | 0.90679378E 02 0.16544934E-02 |
| 1865.75 248.00 | -0.92918555E 01 0.16217965E 04 0.19847277E 07 | -0.13930516E 02 0.33871924E 02 0.18875003E 00 | 0.35889438E 04 0.65032244E 05 -0.10169564E 01 | 0.61577156E 02 0.13582267E 04 0.26483503E 03 | -0.89946818E 02 0.85543548E 00 | 0.90679274E 02 0.16598183E-02 |
| 1866-25 248-50 | -0.92918553E 01 0.16216629E 04 0.19866390E 07 | -0.13930516E 02 0.33869135E 02 0.18836936E 00 | 0.35582352E 04 0.65289979E 05 -0.10168726E 01 | 0.61476095E 02 0.13636096E 04 0.26503441E 03 | -0.89946918E 02 0.85817963E 00 | 0.90660020E 02 0.16651428E-02 |
| 1866.75 249.00 | -0.92918557E 01 0.16215857E 04 0.198860G6E 07 | -0.13930516E 02 0.33867522E 02 0.18799021E 00 | 0.35272980E 04 0.65550479E 05 -0.10168242E 01 | 0.61375602E 02 0.13690502E 04 0.26523528E 03 | -0.89947026E 02 0.86095117E 00 | 0.90659519E 02 0.16705205E-02 |
| 1867•25 249•50 | -0.92918555E 01 0.16214345E 04 0.19904873E 07 | -0.13930516E 02 0.33864365E 02 0.18761336E 00 | 0.34968180E 04 0.65807945E 05 -0.10167294E 01 | 0.61275414E 02 0.13744276E 04 0.26543318E 03 | -0.89947113E 02 0.86368836E 00 | 0.90707769E 02 0.16758315E-02 |
| 1867.75 250.00 | -0.92918557E 01 0.16213316E 04 0.19924195E 07 | -0.13930516E 02 0.33862216E 02 0.18723756E 00 | 0.34661094E 04 0.66068181E 05 -0.10166649E 01 | 0.61175640E 02 0.13798627E 04 0.26563257E 03 | -0.89947209E 02 0.86645293E 00 | 0.90672846E 02 0.16811957E-02 |
| 1868.25 250.50 | -0.92918556E 01 0.16212024E 04 0.19943209E 07 | -0.13930516E 02 0.33859517E 02 0.18686402E 00 | 0.34356294E 04 0.66327295E 05 -0.10165839E 01 | 0.61076334E 02 0.13852744E 04 0.26583047E 03 | -0.89947289E 02 0.86920352E 00 | 0.90715124E 02 0.16865327E-02 |
| 1868.75 251.00 | -0.92918556E 01 0.16210797E 04 0.19962273E 07 | -0.13930516E 02 0.33856954E 02 0.18649185E 00 | 0.34051494E 04 0.66587250E 05 -0.10165069E 01 | 0.60977376E 02 0.13907037E 04 0.26602838E 03 | -0.89947396E 02 0.87196099E 00 | 0.90662407E 02 0.16918831E-02 |
| 1869•25 251•50 | -0.92918556E 01 0.16209690E 04 0.19981414E 07 | -0.13930516E 02 0.33854642E 02 0.18612140E 00 | 0.33746694E 04 0.66848016E 05 -0.10164375E 01 | 0.60878881E 02 0.13961499E 04 0.26622629E 03 | -0.89947477E 02 0.87472498E 00 | 0.90686961E 02 0.16972461E-02 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Reynolds number Longitude, deg Dynamic pressure, lb/ft ² Mach number | latitude, deg deg Dynamic Dynamic pressure, | Altitude m Atmospheric pressure, N/m ² | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² | Earth relative flight-path angle, deg Atmospheric density, | Earth relative heading angle, deg Atmospheric density, |
|---|--|---|--|---|---|---|
| | | Accelerations, g units | Temperature ^O K | kg/m ³ | slug/ft ³ | |
| 1869.75 252.00 | -0.92918556E 01 0.16208554E 04 0.20000496E 07 | -0.13930516E 02 0.33852269E 02 0.18575268E 00 | 0.33442656E 04 0.67108964E 05 -0.10163663E 01 | 0.60780799E 02 0.14015999E 04 0.26642371E 03 | -0.89947586E 02 0.87748886E 00 | 0.90703117E 03 0.17026089E-03 |
| 1870-25 252-50 | -0.92918556E 01 0.16207462E 04 0.20019609E 07 | -0.13930516E 02 0.33849988E 02 0.18538521E 00 | 0.33138618E 04 0.67370737E 05 -0.10162978E 01 | 0.60683027E 02 0.14070671E 04 0.26662112E 03 | -0.89947646E 02 0.88025944E 00 | 0.90693576E 0: 0.17079847E~0: |
| 1870.75 253.00 | -0.92918558E 01 0.16206721E 04 0.20039044E 07 | -0.13930516E 02 0.33848441E 02 0.18501893E 00 | 0.32833056E 04 0.67634653E 05 -0.10162513E 01 | 0.60585662E 02 0.14125791E 04 0.26681953E 03 | -0.89947707E 02 0.88305061E 00 | 0.90675095E 0 0.17134005E-0 |
| 1871.25 253.50 | -0.92918557E 01 0.16205282E 04 0.20057759E 07 | -0.13930516E 02 0.33845436E 02 0.18465505E 00 | 0.32532066E 04 0.67895449E 05 -0.10161611E 01 | 0.60488648E 02 0.14180260E 04 0.26701497E 03 | -0.89947896E 02 0.88580679E 00 | 0.90718674E 0 0.17187483E-0 |
| 1871.75 254.00 | -0.92918555E 01 0.16203958E 04 0.20076548E 07 | -0.13930512E 02 0.33842671E 02 0.18429279E 00 | 0.32231076E 04 0.68157059E 05 -0.10160781E 01 | 0.60392073E 02 0.14234898E 04 0.26721042E 03 | -0.89947928E 02 . 0.88856949E 00 | 0.90676564E 0 0.17241088E-0 |
| 1872.25 254.50 | -0.92918555E 01 0.16202868E 04 0.20095536E 07 | -0.13930512E 02 0.33840394E 02 0.18393195E 00 | 0.31929324E 04 0.68420146E 05 -0.10160097E 01 | 0.60295919E 02 0.14289845E 04 0.26740636E 03 | -0.89948009E 02 0.89134578E 00 | 0.90707608E 0 |
| 1872.75 255.00 | -0.92918556E 01 0.16201886E 04 0.20114601E 07 | -0.13930512E 02 0.33838344E 02 0.18357267E 00 | 0.31627572E 04 0.68684062E 05 -0.10159482E 01 | 0.60200186E 02 0.14344965E 04 0.26760230E 03 | -0.89948108E 02 0.89412878E 00 | 0.90653193E (0.17348956E-0 |
| 1873.25 255.50 | -0.92918556E 01 0.16200743E 04 0.20133468E 07 | -0.13930512E 02 0.33835955E 02 0.18321522E 00 | 0.31327344E 04 0.68947459E 05 -0.10158764E 01 | 0.60104847E 02 0.14399977E 04 0.26779726E 03 | -0.89948216E 02 0.89690425E 00 | 0.90665562E 0 0.17402810E-0 |
| 1873.75 256.00 | -0.92918556E 01 0.16199645E 04 0.20152372E 07 | -0.13930512E 02 0.33833663E 02 0.18285896E 00 | 0.31027116E 04 0.69211686E 05 -0.10158076E 01 | 0.60009807E 02 0.14455161E 04 0.26799221E 03 | -0.89948301E 02 0.89968646E 00 | 0.90730710E (0.17456793E-(|
| 1874-25 256-50 | -0.92918557E 01 0.16198784E 04 0.20171477E 07 | -0.13930512E 02 0.33831865E 02 0.18250411E 00 | 0.30726126E 04 0.69477402E 05 -0.10157537E 01 | 0.59915188E 02 0.14510658E 04 0.26818767E 03 | -0.89948377E 02 0.90248236E CO | 0.90708696E (0.17511043E-(|
| 1874-75 257-00 | -0.92918557E 01 0.16197590E 04 0.20190233E 07 | -0.13930512E 02 0.33829370E 02 0.18215096E 00 | 0.30427422E 04 0.69741921E 05 -0.10156788E 01 | 0.59820874E 02 0.14565903E 04 0.26838164E 03 | -0.89948433E 02 0.90526357E 00 | 0.90739129E (0.17565007E- |
| 1875.25 257.50 | -0.92918556E 01 0.16196517E 04 0.20209068E 07 | -0.13930512E 02 0.33827131E 02 0.18179943E 00 | 0.30128718E 04 0.70007255E 05 -0.10156115E 01 | 0.59726998E 02 0.14621320E 04 0.26857561E 03 | -0.89948552E 02 0.90805137E 00 | 0.90686505E 0.17619099E- |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Dynamic pressure, N/m ² Reynolds number | Longitude, deg Dynamic pressure, lb/ft ² Mach number | Altitude m Atmospheric pressure, N/m ² Accelerations, g units | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature OK | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|---|---|---|---|---|--|
| 1875.75 258.00 | -0.92918556E 01 0.16195407E 04 0.20227839E 07 | -0.13930512E 02 0.33824811E 02 0.18144948E 00 | 0.29830776E 04 0.70272736E 05 -0.10155419E 01 | 0.59633495E 02 0.14676767E 04 0.26876909E 03 | -0.89948620E 02 0.91083872E 00 | 0.90697196E 03 0.17673183E-03 |
| 1876.25 258.50 | -0.92918553E 01 0.16194235E 04 0.20246525E 07 | -0.13930512E 02 0.33822364E 02 0.18110099E 00 | 0.29533596E 04 0.70538341E 05 -0.10154684E 01 | 0.59540329E 02 0.14732239E 04 0.26896208E 03 | -0.89948722E 02 0.91362534E 00 | 0.90687971E 02 0.17727252E-02 |
| 1876.75 259.00 | -0.92918557E 01 0.16193624E 04 0.20265770E 07 | -0.13930512E 02 0.33821088E 02 0.18075304E 00 | 0.29233368E 04 0.70807507E 05 -0.10154301E 01 | 0.59447468E 02 0.14788456E 04 0.26915705E 03 | -0.89948781E 02 0.91644730E 00 | 0.90731674E 0: 0.17782007E-0: |
| 1877.25 259.50 | -0.92918556E 01 0.16192381E 04 0.20284323E 07 | -0.13930512E 02 0.33818492E 02 0.18040771E 00 | 0.28937712E 04 0.71073378E 05 -0.10153521E 01 | 0.59355054E 02 0.14843984E 04 0.26934904E 03 | -0.89948922E 02 0.91923270E 00 | 0.90691786E 0 0.17836053E-0 |
| 1877.75 260.00 | -0.92918556E 01 0.16191299E 04 0.20303031E 07 | -0.13930512E 02 0.33816231E 02 0.18006331E 00 | 0.28641294E 04 0.71340750E 05 -0.10152843E 01 | 0.59262908E 02 0.14899826E 04 0.26954154E 03 | -0.89948958E 02 0.92203183E 00 | 0.90699048E 0 0.17890365E-0 |
| 1878.25 260.50 | -0.92918556E 01 0.16190382E 04 0.20321852E 07 | -0.13930512E 02 0.33814316E 02 0.17972070E 00 | 0.28344876E 04 0.71608947E 05 -0.10152268E 01 | 0.59171268E 02 0.14955840E 04 0.26973404E 03 | -0.89949056E 02 0.92483761E 00 | 0.90714357E 0 0.17944806E-0 |
| 1878.75 261.00 | -0.92918556E 01 0.16189358E 04 0.20340560E 07 | -0.13930509E 02 0.33812178E 02 0.17937928E 00 | 0.28049220E 04 0.71877265E 05 -0.10151626E 01 | 0.59079873E 02 0.15011879E 04 0.26992605E 03 | -0.89949130E 02 0.92764259E 00 | 0.90690396E 0 0.17999232E-0 |
| 1879.25 261.50 | -0.92918557E 01 0.16188439E 04 0.20359342E 07 | -0.13930512E 02 0.33810259E 02 0.17903930E 00 | 0.27753564E 04 0.72146404E 05 -0.10151050E 01 | 0.58988868E 02 0.15068090E 04 0.27011806E 03 | -0.89949214E 02 0.93045422E 00 | 0.90738154E 0 0.18053786E-0 |
| 1879.75 2 62. 00 | -0.92918556E 01 0.16187263E 04 0.20377816E 07 | -0.13930509E 02 0.33807802E 02 0.17870137E 00 | 0.27460194E 04 0.72414264E 05 -0.10150312E 01 | 0.58898288E 02 0.15124034E 04 0.27030858E 03 | -0.89949304E 02 0.93325049E 00 | 0.90695693E 0 0.18108043E-0 |
| 1880.25 262.50 | -0.92918555E 01 0.16186230E 04 0.20396436E 07 | -0.13930509E 02 0.33805645E 02 0.17836423E 00 | 0.27166062E 04 0.72683631E 05 -0.10149664E 01 | 0.58807940E 02 0.15180292E 04 0.27049960E 03 | -0.89949399E 02 0.93606052E 00 | 0.90694774E 0 0.18162566E-0 |
| 1880.75 263.00 | -0.92918556E 01 0.16185429E 04 0.20415257E 07 | -0.13930509E 02 0.33803973E 02 0.17802838E 00 | 0.26871168E 04 0.72954512E 05 -0.10149162E 01 | 0.58717985E 02 0.15236867E 04 0.27069112E 03 | -0.89949479E 02 0.93888434E 00 | 0.90764990E 0 0.18217357E-0 |
| 1881.25 263.50 | -0.92918558E 01 0.16184699E 04 0.20434130E 07 | -0.13930509E 02 0.33802447E 02 0.17769379E 00 | 0.26576274E 04 0.73226211E 05 -0.10148704E 01 | 0.58628358E 02 0.15293613E 04 0.27088264E 03 | -0.89949538E 02 0.94171465E 00 | 0.90727224E 0 0.18272275E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Reynolds number | Longitude, deg Dynamic pressure, lb/ft ² Mach | Altitude m Atmospheric pressure, N/m ² Accelerations, g units | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|--|--|---|--|---|--|
| | number — | number | | o _K | | |
| 1881.75 264.00 | -0.92918556E 01 0.16183376E 04 0.20452384E 07 | -0.13930509E 02 0.33799684E 02 0.17736105E 00 | 0.26285190E 04 0.73495214E 05 -0.10147875E 01 | 0.58538988E 02 0.15349795E 04 0.27107169E 03 | -0.89949661E 02 0.94451498E 00 | 0.90737323E 02 0.18326610E-02 |
| 1882.25 264.50 | -0.92918556E 01 0.16182439E 04 0.20470987E 07 | -0.13930509E 02 0.33797727E 02 0.17702958E 00 | 0.25992582E 04 0.73766422E 05 -0.10147287E 01 | 0.58450065E 02 0.15406438E 04 0.27126173E 03 | -0.89949694E 02 0.94733622E 00 | 0.90744038E 02 0.18381351E-02 |
| 1882.75 265.00 | -0.92918558E 01 0.16181673E 04 0.20489755E 07 | -0.13930509E 02 0.33796128E 02 0.17669904E 00 | 0.25699212E 04 0.74039158E 05 -0.10146807E 01 | 0.58361415E 02 0.15463400E 04 0.27145226E 03 | -0.89949778E 02 0.95017139E 00 | 0.90716781E 02 0.18436362E-02 |
| 1883-25 265-50 | -0.92918558E 01 0.16180640E 04 0.205082G6E 07 | -0.13930509E 02 0.33793970E 02 0.17637043E 00 | 0.25408128E 04 0.74310572E 05 -0.10146159E 01 | 0.58273159E 02 0.15520086E 04 0.27164132E 03 | -0.89949884E 02 0.95299084E 00 | 0.90762198E 02 0.18491069E-02 |
| 1883.75 266.00 | -0.92918557E 01 0.16179684E 04 0.20526716E 07 | -0.13930509E 02 0.33791973E 02 0.17604305E 00 | 0.25117044E 04 0.74582806E 05 -0.10145560E 01 | 0.58185230E 02 0.15576943E 04 0.27183037E 03 | -0.89949951E 02 0.95581684E 00 | 0.90697108E 0: 0.18545902E-0: |
| 1884.25 266.50 | -0.92918556E 01 0.16178464E 04 0.20544910E 07 | -0.13930509E 02 0.33789424E 02 0.17571760E 00 | 0.24828246E 04 0.74853687E 05 -0.10144794E 01 | 0.58097697E 02 0.15633518E 04 0.27201794E 03 | -0.89950023E 02 0.95862687E 00 | 0.90705070E 0: 0.18600426E-0: |
| 1884.75 267.00 | -0.92918556E 01 0.16177696E 04 0.20563550E 07 | -0.13930509E 02 0.33787821E 02 0.17539289E 00 | 0.24537162E 04 0.75127534E 05 -0.10144313E 01 | 0.58010488E 02 0.15690712E 04 0.27220700E 03 | -0.89950126E 02 0.96146569E 00 | 0.90774471E 0 0.18655508E-0 |
| 1885.25 267.50 | -0.92918556E 01 0.16176701E 04 0.20581948E 07 | -0.13930509E 02 0.33785743E 02 0.17506946E 00 | 0.24247602E 04 0.75400746E 05 -0.10143689E 01 | 0.57923512E 02 0.15747774E 04 0.27239507E 03 | -0.89950162E 02 0.96429595E 00 | 0.90713551E 0 0.18710424E-0 |
| 1885.75 268.00 | -0.92918557E 01 0.16175960E 04 0.20600567E 07 | -0.13930509E 02 0.33784196E 02 0.17474737E 00 | 0.23957280E 04 0.75675483E 05 -0.10143225E 01 | 0.57836956E 02 0.15805154E 04 0.27258363E 03 | -0.89950262E 02 0.96714007E 00 | 0.90732481E 0 0.18765609E-0 |
| 1886.25 268.50 | -0.92918558E 01 0.16175166E 04 0.20619106E 07 | -0.13930505E 02 0.33782538E 02 0.17442662E 00 | 0.23667720E 04 0.75950325E 05 -0.10142727E 01 | 0.57750710E 02 0.15862556E 04 0.27277171E 03 | -0.89950332E 02 0.96998329E 00 | 0.90723198E 0 0.18820777E-0 |
| 1886.75 269.00 | -0.92918558E 01 0.16174164E 04 0.20637418E 07 | -0.13930505E 02 0.33780445E 02 0.17410723E 00 | 0.23379684E 04 0.76224512E 05 -0.10142099E 01 | 0.57664728E 02 0.15919821E 04 0.27295879E 03 | -0.89950475E 02 0.97281779E 00 | 0.90764124E 0 0.18875775E-0 |
| 1887.25 269.50 | -0.92918558E 01 0.16173378E 04 0.20655923E 07 | -0.13930505E 02 0.33778803E 02 0.17378898E 00 | 0.23090886E 04 0.76500226E 05 -0.10141605E 01 | 0.57579095E 02 0.15977405E 04 0.27314637E 03 | -0.89950460E 02 0.97566612E 00 | 0.90781777E (0.18931042E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|--|---|---|--|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² Reynolds number | Dynamic pressure, lb/ft ² Mach number | Atmospheric pressure, N/m ² Accelerations, g units | Atmospheric pressure, lb/ft ² Temperature OK | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | | · r | · · · · · · · · · · · · · · · · · · · | K | | ······································ |
| 1887.75 270.00 | -0.92918558E 01 0.16172287E 04 0.20674686E 07 | -0.13930505E 02 0.33776524E 02 0.17347234E 00 | 0.22804374E 04 0.76774567E 05 -0.10140921E 01 | 0.57493764E 02 0.16034702E 04 0.27333247E 03 | -0.89950596E 02 0.97849835E 00 | 0.90772229E 02 0.18985996E-02 |
| 1888.25 270.50 | -0.92918558E 01 0.16171392E 04 0.20692434E 07 | -0.13930505E 02 0.33774655E 02 0.17315673E 00 | 0.22517100E 04 0.77050436E 05 -0.10140360E 01 | 0.57408746E 02 0.16092318E 04 0.27351907E 03 | -0.89950686E 02 0.98134436E 00 | 0.90733232E 02 0.19041218E-02 |
| 1888.75 271.00 | -0.92918557E 01 0.16170475E 04 0.20710720E 07 | -0.13930505E 02 0.33772740E 02 0.17284260E 00 | 0.22230588E 04 0.77326371E 05 -0.10139785E 01 | 0.57324091E 02 0.16149949E 04 0.27370517E 03 | -0.89950733E 02 0.98418915E 00 | 0.90762736E 02 0.19096416E-02 |
| 1889.25 271.50 | -0.92918558E 01 0.16169737E 04 0.20729179E 07 | -0.13930505E 02 0.33771198E 02 0.17252938E 00 | 0.21943314E 04 0.77603852E 05 -0.10139322E 01 | 0.57239711E 02 0.16207902E 04 0.27389177E 03 | -0.89950818E 02 0.98704793E 00 | 0.90757819E 02 0.19151885E-02 |
| 1889.75 272.00 | -0.92918557E 01 0.16168699E 04 0.20747297E 07 | -0.13930505E 02 0.33769031E 02 0.17221779E 00 | 0.21658326E 04 0.77879912E 05 -0.10138671E 01 | 0.57155643E 02 0.16265558E 04 0.27407688E 03 | -0.89950891E 02 0.98989015E 00 | 0.90723589E 02 0.19207033E-02 |
| 1890.25 272.50 | -0.92918556E 01 0.16167785E 04 0.20765503E 07 | -0.13930505E 02 0.33767123E 02 0.17190764E 00 | 0.21373338E 04 0.78156778E 05 -0.10138099E 01 | 0.57071971E 02 0.16323383E 04 0.27426200E 03 | -0.89950950E 02 0.99273872E 00 | 0.90765313E 02 0.19262305E-02 |
| 1890.75 273.00 | -0.92918557E 01 0.16167090E 04 0.20783903E 07 | -0.13930505E 02 0.33765669E 02 0.17159857E 00 | 0.21087588E 04 0.78435193E 05 -0.10137662E 01 | 0.56988638E 02 0.16381531E 04 0.27444761E 03 | -0.89951046E 02 0.99560127E 00 | 0.90784363E 02 0.19317847E-02 |
| 1891-25 273-50 | -0.92918558E 01 0.16166503E 04 0.20802433E 07 | -0.13930505E 02 0.33764444E 02 0.17129004E 00 | 0.20801076E 04 0.78715148E 05 -0.10137294E 01 | 0.56905457E 02 0.16440001E 04 0.27463372E 03 | -0.89951082E 02 0.99847778E 00 | 0.90742642E 02 0.19373661E-02 |
| 1891.75 274.00 | -0.92918557E 01 0.16165541E 04 0.20820522E 07 | -0.13930505E 02 0.33762436E 02 0.17098351E 00 | 0.20517612E 04 0.78992931E 05 -0.10136691E 01 | 0.56822665E 02 0.16498017E 04 0.27481786E 03 | -0.89951151E 02 0.10013300E 01 | 0.90776923E 02 0.19429003E-02 |
| 1892-25 274-50 | -0.92918557E 01 0.16164637E 04 0.20838653E 07 | -0.13930505E 02 0.33760546E 02 0.17067805E 00 | 0.20234148E 04 0.79271497E 05 -0.10136124E 01 | 0.56740149E 02 0.16556197E 04 0.27500199E 03 | -0.89951268E 02 0.10041883E 01 | 0.90775260E 02 0.19484463E-02 |
| 1892.75 275.00 | -0.92918556E 01 0.16163811E 04 0.20856843E 07 | -0.13930505E 02 0.33758822E 02 0.17037373E 00 | 0.19950684E 04 0.79550874E 05 -0.10135607E 01 | 0.56657940E 02 0.16614546E 04 0.27518612E 03 | -0.89951339E 02 0.10070531E 01 | 0.90744369E 02 0.19540049E-02 |
| 1893.25 275.50 | -0.92918557E 01 0.16162814E 04 0.20874825E 07 | -0.13930502E 02 0.33756740E 02 0.17007085E 00 | 0.19668744E 04 0.79829540E 05 -0.10134981E 01 | 0.56576036E 02 0.16672747E 04 0.27536927E 03 | -0.89951391E 02 0.10099087E 01 | 0.90771572E 02 0.19595457E-02 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Reynolds number | Longitude, deg Dynamic pressure, lb/ft ² Mach number | Altitude m Atmospheric pressure, N/m ² Accelerations, g units | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature OK | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|--|---|---|--|---|--|
| 1893.75 276.00 | -0.92918556E 01 0.16162035E 04 0.20893003E 07 | -0.13930505E 02 0.33755113E 02 0.16976907E 00 | 0.19386042E 04 0.80109747E 05 -0.10134493E 01 | 0.56494472E 02 0.16731269E 04 0.27555291E 03 | -0.89951471E 02 0.10127781E 01 | 0.90775538E 02 0.19651132E-02 |
| 1894.25 276.50 | -0.92918556E 01 0.16161133E 04 0.20911055E 07 | -0.13930502E 02 0.33753228E 02 0.16946816E 00 | 0.19104102E 04 0.80389998E 05 -0.10133927E 01 | 0.56413077E 02 0.16789801E 04 0.27573606E 03 | -0.89951577E 02 0.10156460E 01 | 0.90723760E 02 0.19706780E-02 |
| 1894.75 277.00 | -0.92918556E 01 0.16160474E 04 0.20929324E 07 | -0.13930502E 02 0.33751852E 02 0.16916845E 00 | 0.18821400E 04 0.80671808E 05 -0.10133514E 01 | 0.56332059E 02 0.16848658E 04 0.27591971E 03 | -0.89951612E 02 0.10185280E 01 | 0.90744131E 02 0.19762700E-02 |
| 1895.25 277.50 | -0.92918557E 01 0.16159664E 04 0.20947399E 07 | -0.13930502E 02 0.33750160E 02 0.16887027E 00 | 0.18540222E 04 0.80952896E 05 -0.10133006E 01 | 0.56251376E 02 0.16907364E 04 0.27610237E 03 | -0.89951689E 02 0.10214008E 01 | 0.90740161E 02 0.19818440E-02 |
| 1895.75 278.00 | -0.92918557E 01 0.16158909E 04 0.20965513E 07 | -0.13930502E 02 0.33748584E 02 0.16857309E 00 | 0.18259044E 04 0.81234771E 05 -0.10132533E 01 | 0.56170957E 02 0.16966235E 04 0.27628503E 03 | -0.89951809E 02 0.10242796E 01 | 0.90788988E 02 0.19874299E-02 |
| 1896.25 278.50 | -0.92918558E 01 0.16158179E 04 0.20983649E 07 | -0.13930502E 02 0.33747060E 02 0.16827677E 00 | 0.17977866E 04 0.81517440E 05 -0.10132075E 01 | 0.56090750E 02 0.17025272E 04 0.27646769E 03 | -0.89951863E 02 0.10271647E 01 | 0.90788363E 02 0.19930279E-02 |
| 1896.75 279.00 | -0.92918558E 01 0.16157495E 04 0.21001821E 07 | -0.13930502E 02 0.33745631E 02 0.16798139E 00 | 0.17696688E 04 0.81800911E 05 -0.10131646E 01 | 0.56010787E 02 0.17084476E 04 0.27665035E 03 | -0.89951915E 02 0.10300560E 01 | 0.90744522E 02 0.19986380E-02 |
| 1897.25 279.50 | -0.92918558E 01 0.16156659E 04 0.21019797E 07 | -0.13930502E 02 0.33743885E 02 0.16768750E 00 | 0.17417034E 04 0.82083643E 05 -0.10131122E 01 | 0.55931150E 02 0.17143526E 04 0.27683203E 03 | -0.89951993E 02 0.10329379E 01 | 0.90765647E 02 0.20042298E-02 |
| 1897.75 280.00 | -0.92918559E 01 0.16156157E 04 0.21038101E 07 | -0.13930502E 02 0.33742836E 02 0.16739447E 00 | 0.17135856E 04 0.82368719E 05 -0.10130807E 01 | 0.55851827E 02 0.17203065E 04 0.27701469E 03 | -0.89952035E 02 0.10358418E 01 | 0.90757159E 02 0.20098643E-02 |
| 1898.25 280.50 | -0.92918558E 01 0.16155098E 04 0.21055792E 07 | -0.13930502E 02 0.33740625E 02 0.16710317E 00 | 0.16858488E 04 0.82650725E 05 -0.10130143E 01 | 0.55772767E 02 0.17261963E 04 0.27719489E 03 | -0.89952144E 02 0.10387126E 01 | 0.90801157E 02 0.20154344E-02 |
| 1898.75 281.00 | -0.92918558E 01 0.16154367E 04 0.21073802E 07 | -0.13930502E 02 0.33739098E 02 0.16681271E 00 | 0.16579596E 04 0.82935048E 05 -0.10129685E 01 | 0.55694015E 02 0.17321345E 04 0.27737607E 03 | -0.89952224E 02 0.10416050E 01 | 0.90815658E 02 0.20210466E-02 |
| 1899.25 281.50 | -0.92918558E 01 0.16153440E 04 0.21091590E 07 | -0.13930502E 02 0.33737161E 02 0.16652348E 00 | 0.16302228E 04 0.83218616E 05 -0.10129103E 01 | 0.55615506E 02 0.17380570E 04 0.27755627E 03 | -0.89952281E 02 0.10444878E 01 | 0.90786147E 02 0.20266403E-02 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|---|---|--|---|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² | Dynamic pressure, lb/ft ² | Atmospheric pressure, N/m ² Accelerations. | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | Reynolds number | Mach number | g units | Temperature ^O K | | |
| 1899.75 282.00 | -0.92918558E 01 0.16152964E 04 0.21109829E 07 | -0.13930502E 02 0.33736167E 02 0.16623492E 00 | 0.16022574E 04 0.83505324E 05 -0.10128805E 01 | 0.55537298E 02 0.17440450E 04 0.27773795E 03 | -0.89952305E 02 0.10474007E 01 | 0.90815747E 02 0.20322923E-02 |
| 1900.25 282.50 | -0.92918558E 01 0.16152064E 04 0.21127594E 07 | -0.13930502E 02 0.33734287E 02 0.16594797E 00 | 0.15745968E 04 0.83789692E 05 -0.10128240E 01 | 0.55459364E 02 0.17499841E 04 0.27791766E 03 | -0.89952396E 02 0.10502880E 01 | 0.90808797E 02 0.20378944E-02 |
| 1900•75 283•00 | -0.92918558E 01 0.16151212E 04 0.21145395E 07 | -0.13930498E 02 0.33732509E 02 0.16566194E 00 | 0.15469362E 04 0.84074851E 05 -0.10127706E 01 | 0.55381671E 02 0.17559398E 04 0.27809736E 03 | -0.89952475E 02 0.10531814E 01 | 0.90756783E 02 0.20435085E-02 |
| 1901-25 283-50 | -0.92918558E 01 0.16150339E 04 0.21163137E 07 | -0.13930502E 02 0.33730685E 02 0.16537725E 00 | 0.15193518E 04 0.84359999E 05 -0.10127159E 01 | 0.55304309E 02 0.17618953E 04 0.27827657E 03 | -0.89952577E 02 0.10560728E 01 | 0.90772482E 02 0.20491189E-02 |
| 1901.75 284.00 | -0.92918558E 01 0.16149859E 04 0.21181293E 07 | -0.13930498E 02 0.33729682E 02 0.16509292E 00 | 0.14915388E 04 0.84648309E 05 -0.10126858E 01 | 0.55227148E 02 0.17679167E 04 0.27845727E 03 | -0.89952616E 02 0.10589944E 01 | 0.90829088E 02 0.20547876E-02 |
| 1902 - 25 28 4- 50 | -0.92918558£ 01 0.16149130E 04 0.21199139E 07 | -0.13930502E 02 0.33728159E 02 0.16481029E 00 | 0.14639544E 04 0.84935040E 05 -0.10126400E 01 | 0.55150342E 02 0.17739052E 04 0.27863649E 03 | -0.89952671E 02 0.10618981E 01 | 0.90769608E 02 0.20604218E-02 |
| 1902.75 285.00 | -0.92918556E 01 0.16148078E 04 0.21216630E 07 | -0.13930498E 02 0.33725964E 02 0.16452898E 00 | 0.14365986E 04 0.85220185E 05 -0.10125741E 01 | 0.55073764E 02 0.17798606E 04 0.27881422E 03 | -0.89952746E 02 0.10647839E 01 | 0.90756219E 02 0.20660212E-02 |
| 1903.25 285.50 | -0.92918556E 01 0.16147333E 04 0.21234422E 07 | -0.13930502E 02 0.33724407E 02 0.16424836E 00 | 0.14090904E 04 0.85507682E 05 -0.10125274E 01 | 0.54997449E 02 0.17858651E 04 0.27899294E 03 | -0.89952864E 02 0.10676917E 01 | 0.90798373E 02 0.20716632E-02 |
| 1903.75 286.00 | -0.92918556E 01 0.16146718E 04 0.21252309E 07 | -0.13930498E 02 0.33723124E 02 0.16396906E 00 | 0.13815822E 04 0.85795976E 05 -0.10124888E 01 | 0.54921509E 02 0.17918862E 04 0.27917167E 03 | -0.89952920E 02 0.10706056E 01 | 0.90822848E 02 0.20773171E-02 |
| 1904.25 286.50 | -0.92918558E 01 0.16146190E 04 0.21270310E 07 | -0.13930498E 02 0.33722020E 02 0.16369007E 00 | 0.13539978E 04 0.86085865E 05 -0.10124557E 01 | 0.54845657E 02 0.17979407E 04 0.27935089E 03 | -0.89952948E 02 0.10735338E 01 | 0.90767983E 02 0.20829988E-02 |
| 1904-75 287-00 | -0.92918557E 01 0.16145331E 04 0.21287893E 07 | -0.13930498E 02 0.33720226E 02 0.16341310E 00 | 0.13267182E 04 0.86373328E 05 -0.10124019E 01 | 0.54770225E 02 0.18039445E 04 0.27952813E 03 | -0.89953053E 02 0.10764357E 01 | 0.90802313E 02 0.20886293E-02 |
| 1905-25 287-50 | -0.92918558E 01 0.16144714E 04 0.21305742E 07 | -0.13930498E 02 0.33718937E 02 0.16313648E 00 | 0.12992862E 04 0.86663176E 05 -0.10123632E 01 | 0.54694942E 02 0.18099981E 04 0.27970636E 03 | -0.89953106E 02 0.10793597E 01 | 0.90770645E 02 0.20943028E-02 |
| | | | | | | |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² Reynolds number | Longitude, deg Dynamic pressure, lb/ft ² Mach number | Altitude m Atmospheric pressure, N/m ² Accelerations, g units | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² Temperature OK | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|--|--|--|--|---|--|
| 1905.75 288.00 | -0.92918556E 01 0.16143838E 04 0.21323277E 07 | -0.13930498E 02 0.33717107E 02 0.16286146E 00 | 0.12720828E 04 0.86951405E 05 -0.10123082E 01 | 0.54619982E 02 0.18160179E 04 0.27988312E 03 | -0.89953212E 02 0.10822656E 01 | 0.90807248E 02 0.20999411E-02 |
| 1906-25 288-50 | -0.92918558E 01 0.16143366E 04 0.21341231E 07 | -0.13930498E 02 0.33716122E 02 0.16258684E 00 | 0.12446508E 04 0.87242828E 05 -0.10122786E 01 | 0.54545242E 02 0.18221044E 04 0.28006135E 03 | -0.89953221E 02 0.10852018E 01 | 0.90792338E 02 0.21056383E-02 |
| 1906.75 289.00 | -0.92918556E 01 0.16142473E 04 0.2135871CE 07 | -0.13930498E 02 0.33714257E 02 0.16231376E 00 | 0.12175236E 04 0.87531796E 05 -0.10122226E 01 | 0.54470760E 02 0.18281396E 04 0.28023761E 03 | -0.89953299E 02 0.10881114E 01 | 0.90831786E 0: 0.21112839E-0: |
| 1907.25 289.50 | -0.92918557E 01 0.16141883E 04 0.21376497E 07 | -0.13930498E 02 0.33713025E 02 0.16204131E 00 | 0.11902440E 04 0.87823177E 05 -0.10121856E 01 | 0.54396525E 02 0.18342252E 04 0.28041486E 03 | -0.89953377E 02 0.10910434E 01 | 0.90827267E 0 0.21169730E-0 |
| 1907.75 290.00 | -0.92918558E 01 0.16141344E 04 0.21394322E 07 | -0.13930498E 02 0.33711898E 02 0.16176975E 00 | 0.11629644E 04 0.88115336E 05 -0.10121518E 01 | 0.54322522E 02 0.18403271E 04 0.28059211E 03 | -0.89953416E 02 0.10939815E 01 | 0.90870667E 0 0.21226739E-0 |
| 1908-25 290-50 | -0.92918558E 01 0.16140640E 04 0.21411943E 07 | -0.13930498E 02 0.33710428E 02 0.16149947E 00 | 0.11358372E 04 0.88406657E 05 -0.10121077E 01 | 0.54248795E 02 0.18464115E 04 0.28076838E 03 | -0.89953535E 02 0.10969093E 01 | 0.90779816E 0 0.21283547E-0 |
| 1908.75 291.00 | -0.92918556E 01 0.16139846E 04 0.21429455E 07 | -0.13930498E 02 0.33708770E 02 0.16123012E 00 | 0.11087862E 04 0.88697925E 05 -0.10120579E 01 | 0.54175268E 02 0.18524947E 04 0.28094415E 03 | -0.89953570E 02 0.10998347E 01 | 0.90826421E 0 0.21340309E-0 |
| 1909.25 291.50 | -0.92918558E 01 0.16139170E 04 0.21447055E 07 | -0.13930495E 02 0.33707359E 02 0.16096195E 00 | 0.10817352E 04 0.88989992E 05 -0.10120155E 01 | 0.54102076E 02 0.18585947E 04 0.28111992E 03 | -0.89953660E 02 0.11027663E 01 | 0.90847697E 0 0.21397192E-0 |
| 1909.75 292.00 | -0.92918557E 01 0.16138553E 04 0.21464696E 07 | -0.13930498E 02 0.33706070E 02 0.16069471E 00 | 0.10546842E 04 0.89282820E 05 -0.10119768E 01 | 0.54029133E 02 0.18647105E 04 0.28129569E 03 | -0.89953721E 02 0.11057037E 01 | 0.90823053E (0.21454186E-(|
| 1910.25 292.50 | -0.92918558E 01 0.16138069E 04 0.21482483E 07 | -0.13930495E 02 0.33705060E 02 0.16042798E 00 | 0.10275570E 04 0.89577265E 05 -0.10119465E 01 | 0.53956350E 02 0.18708601E 04 0.28147196E 03 | -0.89953796E 02 0.11086555E 01 | 0.90833650E 0.21511460E- |
| 1910.75 293.00 | -0.92918558E 01 0.16137085E 04 0.21499687E 07 | -0.13930498E 02 0.33703003E 02 0.16016307E 00 | 0.10008108E 04 0.89868350E 05 -0.10118848E 01 | 0.53883881E 02 0.18769396E 04 0.28164575E 03 | -0.89953843E 02 0.11115717E 01 | 0.90810486E 0.21568045E- |
| 1911.25 293.50 | -0.92918558E 01 0.16136517E 04 0.21517323E 07 | -0.13930495E 02 0.33701817E 02 0.15989861E 00 | 0.97383600E 03 0.90162692E 05 -0.10118491E 01 | 0.53811646E 02 0.18830870E 04 0.28182103E 03 | -0.89953890E 02 0.11145188E 01 | 0.90839224E 0.21625228E- |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² | Longitude, deg Dynamic pressure, lb/ft ² | Altitude m Atmospheric pressure, N/m ² Accelerations. | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|--|---|---|--|---|--|
| | Reynolds number | Mach number | g units | Temperature ^O K | | |
| 1911.75 294.00 | -0.92918558E 01 0.16135969E 04 0.21534980E 07 | -0.13930498E 02 0.33700674E 02 0.15963484E 00 | 0.94686120E 03 0.90457825E 05 -0.10118148E 01 | 0.53739583E 02 0.18892510E 04 0.28199632E 03 | -0.89953943E 02 0.11174720E 01 | 0.90805063E 02 0.21682529E~02 |
| 1912.25 294.50 | -0.92918558E 01 0.16135250E 04 0.21552428E 07 | -0.13930495E 02 0.33699172E 02 0.15937229E 00 | 0.92003880E 03 0.90752065E 05 -0.10117697E 01 | 0.53667776E 02 0.18953963E 04 0.28217061E 03 | -0.89954069E 02 0.11204144E 01 | 0.90828113E 02 0.21739620E-02 |
| 1912-75 295.00 | -0.92918558E 01 0.16134505E 04 0.21569809E 07 | -0.13930495E 02 0.33697616E 02 0.15911093E 00 | 0.89329259£ 03 0.91046252E 05 -0.10117230E 01 | 0.53596262E 02 0.19015406E 04 0.28234441E 03 | -0.89954083E 02 0.11233545E 01 | 0.90812107E 02 0.21796668E-02 |
| 1913.25 295.50 | -0.92918558E 01 0.16133829E 04 0.21587242E 07 | -0.13930495E 02 0.33696202E 02 0.15885050E 00 | 0.86654639E 03 0.91341196E 05 -0.10116806E 01 | 0.53525003E 02 0.19077006E 04 0.28251822E 03 | -0.89954146E 02 0.11263002E 01 | 0.90852897E 02 0.21853825E-02 |
| 1913.75 296.00 | -0.92918558E 01 0.16133217E 04 0.21604725E 07 | -0.13930495E 02 0.33694926E 02 0.15859096E 00 | 0.83980019E 03 0.91636934E 05 -0.10116422E 01 | 0.53453987E 02 0.19138772E 04 0.28269202E 03 | -0.89954205E 02 0.11292522E 01 | 0.90846063E 02 0.21911102E-02 |
| 1914.25 296.50 | -0.92918558E 01 0.16132904E 04 0.21622513E 07 | -0.13930495E 02 0.33694272E 02 0.15833202E 00 | 0.81290160E 03 0.91935127E 05 -0.10116226E 01 | 0.53383205E 02 0.19201051E 04 0.28286681E 03 | -0.89954244E 02 0.11322268E 01 | 0.90890390E 0: 0.21968819E-0: |
| 1914.75 297.00 | -0.92918558E 01 0.16132134E 04 0.21639797E 07 | -0.13930495E 02 0.33692663E 02 0.15807432E 00 | 0.78630779E 03 0.92230720E 35 -0.10115743E 01 | 0.53312597E 02 0.19262787E 04 0.28303963E 03 | -0.89954323E 02 0.11351736E 01 | 0.90872352E 0: 0.22025997E-0: |
| 1915 . 25 29 7. 50 | -0.92918558E 01 0.16131553E 04 0.21657264E 07 | -0.13930495E 02 0.33691450E 02 0.15781740E 00 | 0.75963779E 03 0.92527935E 05 -0.10115379E 01 | 0.53242239E 02 0.19324861E 04 0.28321294E 03 | -0.89954398E 02 0.11381348E 01 | 0.90807144E 0: 0.22083454E-0: |
| 1915.75 298.00 | -0.92918558E 01 0.16130844E 04 0.21674544E 07 | -0.13930495E 02 0.33689970E 02 0.15756186E 00 | 0.73312019E 03 0.92824227E 05 -0.10114934E 01 | 0.53172199E 02 0.19386743E 04 0.28338527E 03 | -0.89954494E 02 0.11410850E 01 | 0.90812858E 0: 0.22140697E-0: |
| 1916.25 298.50 | -0.92918558E 01 0.16130138E 04 0.21691834E 07 | -0.13930495E 02 0.33688495E 02 0.15730691E 00 | 0.70660259E 03 0.93121279E 05 -0.10114492E 01 | 0.53102300E 02 0.19448784E 04 0.28355759E 03 | -0.89954539E 02 0.11440410E 01 | 0.90848833E 0. 0.22198052E-0. |
| 1916.75 299.00 | -0.92918558E 01 0.16129823E 04 0.21709547E 07 | -0.13930495E 02 0.33687836E 02 0.15705225E 00 | 0.67985640E 03 0.93421687E 05 -0.10114294E 01 | 0.53032580E 02 0.19511526E 04 0.28373141E 03 | -0.89954599E 02 0.11470286E 01 | 0.90822058E 0 0.22256021E-0 |
| 1917.25 299.50 | -0.92918558E 01 0.16128965E 04 0.21726638E 07 | -0.13930495E 02 0.33686044E 02 0.15679912E 00 | 0.65349120E 03 0.93718574E 05 -0.10113756E 01 | 0.52963090E 02 0.19573532E 04 0.28390274E 03 | -0.89954661E 02 0.11499793E 01 | 0.90846896E 0 0.22313274E-0 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

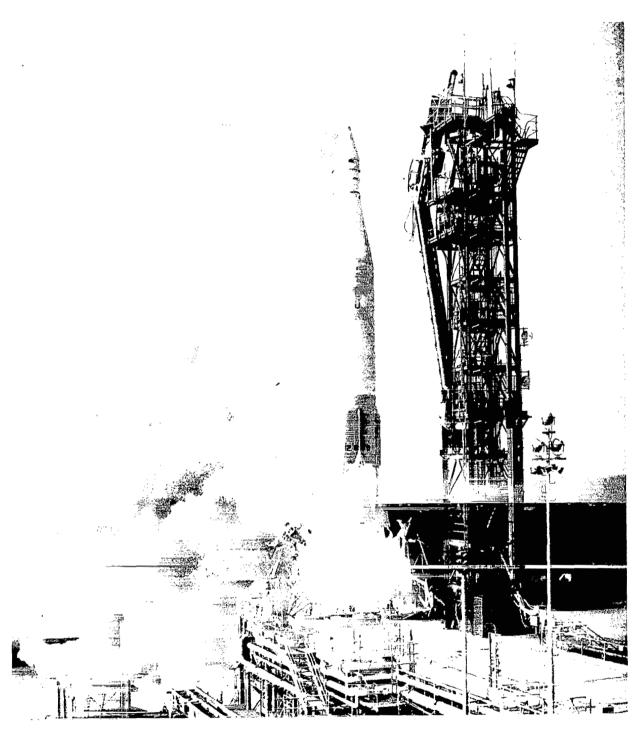
| Flight elapsed time, sec Elapsed time from entry point, sec | Geodetic latitude, deg Dynamic pressure, N/m ² | Longitude, deg Dynamic pressure, ib/ft ² | Altitude m Atmospheric pressure, N/m ² | Earth relative velocity, m/sec Atmospheric pressure, lb/ft ² | Earth relative flight-path angle, deg Atmospheric density, kg/m ³ | Earth relative heading angle, deg Atmospheric density, slug/ft ³ |
|---|--|---|--|---|---|--|
| | Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | | stuß/tt |
| 1917.75 300.00 | -0.92918558E 01 0.16128472E 04 0.21744086E 07 | -0.13930495E 02 0.33685014E 02 0.15654689E 00 | 0.62697359E 03 0.94017950E 05 -0.10113447E 01 | 0.52893937E 02 0.19636058E 04 0.28407507E 03 | -0.89954743E 02 0.11529530E 01 | 0.90845152E 02 0.22370973E-02 |
| 1918.25 300.50 | -0.92918558E 01 0.16127867E 04 0.21761413E 07 | -0.13930495E 02 0.33683751E 02 0.15629537E 00 | 0.60053220E 03 0.94317248E 05 -0.10113067E 01 | 0.52824925E 02 0.19698567E 04 0.28424691E 03 | -0.89954789E 02 0.11559241E 01 | 0.90873601E 02 0.22428622E-02 |
| 1918.75 301.00 | -0.92918558E 01 0.16127105E 04 0.21778534E 07 | -0.13930492E 02 0.33682160E 02 0.15604509E 00 | 0.57424319E 03 0.94615582E 05 -0.10112590E 01 | 0.52756180E 02 0.19760876E 04 0.28441776E 03 | -0.89954877E 02 0.11588638E 01 | 0.90859803E 0: 0.22486051E-0: |
| 1919-25 301-50 | -0.92918558E 01 0.16126552E 04 0.21795853E 07 | -0.13930495E 02 0.33681004E 02 0.15579564E 00 | 0.54787800E 03 0.94915549E 05 -0.10112243E 01 | 0.52687709E 02 0.19823525E 04 0.28458910E 03 | -0.89954868E 02 0.11618580E 01 | 0.90905508E 0: 0.22543759E-0: |
| 1919.75 302.00 | -0.92918558E 01 0.16126043E 04 0.21813206E 07 | -0.13930492E 02 0.33679941E 02 0.15554695E 00 | 0.52151279E 03 0.95216285E 05 -0.10111924E 01 | 0.52619440E 02 0.19886335E 04 0.28476044E 03 | -0.89954951E 02 0.11648380E 01 | 0.90895376E 0 0.22601580E-0 |
| 1920.25 302.50 | -0.92918558E 01 0.16125446E 04 0.21830455E 07 | -0.13930495E 02 0.33678696E 02 0.15529909E 00 | 0.49522380E 03 0.95516928E 05 -0.10111550E 01 | 0.52551351E 02 0.19949126E 04 0.28493130E 03 | -0.89955047E 02 0.11678152E 01 | 0.90819746E 0 0.22659349E-0 |
| 1920.75 303.00 | -0.92918558E 01 0.16125006E 04 0.21847866E 07 | -0.13930492E 02 0.33677776E 02 0.15505181E 00 | 0.46885860E 03 0.95819215E 05 -0.10111274E 01 | 0.52483449E 02 0.20012260E 04 0.28510264E 03 | -0.89955063E 02 0.11708070E 01 | 0.90892242E 0 0.22717399E-0 |
| 1921.25 303.50 | -0.92918558E 01 0.16124306E 04 0.21864951E 07 | -0.13930492E 02 0.33676314E 02 0.15480595E 00 | 0.44272200E 03 0.96119651E 05 -0.10110835E 01 | 0.52415833E 02 0.20075007E 04 0.28527251E 03 | -0.89955144E 02 0.11737787E 01 | 0.90819387E 0 0.22775058E-0 |
| 1921.75 304.00 | -0.92918558E 01 0.16123740E 04 0.21882182E 07 | -0.13930492E 02 0.33675132E 02 0.15456056E 00 | 0.41650920E 03 0.96421723E 05 -0.10110480E 01 | 0.52348370E 02 0.20138096E 04 0.28544287E 03 | -0.89955237E 02 0.11767647E 01 | 0.90887846E 0 0.22832997E-0 |
| 1922.25 304.50 | -0.92918558E 01 0.16123156E 04 0.21899355E 07 | -0.13930492E 02 0.33673912E 02 0.15431631E 00 | 0.39037260E 03 0.96723690E 05 -0.10110113E 01 | 0.52281193E 02 0.20201163E 04 0.28561273E 03 | -0.89955231E 02 0.11797480E 01 | 0.90913520E 0 0.22890882E-0 |
| 1922.75 305.00 | -0.92918559E 01 0.16122736E 04 0.21916694E 07 | -0.13930492E 02 0.33673034E 02 0.15407266E 00 | 0.36415980E 03 0.97027312E 05 -0.10109850E 01 | 0.52214214E 02 0.20264576E 04 0.28578310E 03 | -0.89955322E 02 0.11827458E 01 | 0.90883007E (0.22949049E-0 |
| 1923.25 305.50 | -0.92918558E 01 0.16121867E 04 0.21933532E 07 | -0.13930492E 02 0.33671219E 02 0.15383021E 00 | 0.33825180E 03 0.97328160E 05 -0.10109305E 01 | 0.52147403E 02 0.20327409E 04 0.28595148E 03 | -0.89955408E 02 0.11857144E 01 | 0.90887790E (0.23006650E-(|

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Continued

| Flight elapsed time, sec | Geodetic latitude, deg | Longitude, deg | Altitude m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|---|---|--|--|---|
| Elapsed time from entry point, sec | Dynamic pressure, N/m ² | | Atmospheric pressure, N/m ² | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ |
| | Reynolds number | Mach number | Accelerations, g units | Temperature ^O K | L g/ III | |
| 1923.75 306.00 | -0.92918558E 01 0.16121471E 04 0.21950849E 07 | -0.13930492E 02 0.33670393E 02 0.15358843E 00 | 0.31211520E 03 0.97632434E 05 -0.10109057E 01 | 0.52080904E 02 0.20390958E 04 0.28612135E 03 | -0.89955469E 02 0.11887151E 01 | 0.90859486E 02 0.23064873E-02 |
| 1924.25 306.50 | -0.92918558E 01 0.16120920E 04 0.21968011E 07 | -0.13930492E 02 0.33669242E 02 0.15334713E 00 | 0.28605480E 03 0.97936582E 05 -0.10108711E 01 | 0.52014472E 02 0.20454481E 04 0.28629073E 03 | -0.89955510E 02 0.11917128E 01 | 0.90846212E 02 0.23123038E-02 |
| 1924.75 307.00 | -0.92918558E 01 0.16120339E 04 0.21985106E 07 | -0.13930492E 02 0.33668028E 02 0.15310690E 00 | 0.26007060E 03 0.98240611E 05 -0.10108347E 01 | 0.51948302E 02 0.20517979E 04 0.28645961E 03 | -0.89955601E 02 0.11947075E 01 | 0.90894244E 02 0.23181145E-02 |
| 1925.25 307.50 | -0.92918558E 01 0.16119694E 04 0.22002112E 07 | -0.13930492E 02 0.33666681E 02 0.15286758E 00 | 0.23416260E 03 0.98544509E 05 -0.10107942E 01 | 0.51882345E 02 0.20581449E 04 0.28662800E 03 | -0.89955632E 02 0.11976992E 01 | 0.90883881E 02 0.23239193E-02 |
| 1925.75 308.00 | -0.92918559E 01 0.16119380E 04 0.22019451E 07 | -0.13930492E 02 0.33666026E 02 0.15262895E 00 | 0.20810220E 03 0.98850970E 05 -0.10107746E 01 | 0.51816658E 02 0.20645455E 04 0.28679738E 03 | -0.89955700E 02 0.12007143E 01 | 0.90829395E 02 0.23297696E-02 |
| 1926.25 308.50 | -0.92918559E 01 0.16118831E 04 0.22036531E 07 | -0.13930492E 02 0.33664879E 02 0.15239111E 00 | 0.18219420E 03 0.99156396E 05 -0.10107401E 01 | 0.51751097E 02 0.20709244E 04 0.28696577E 03 | -0.89955730E 02 0.12037175E 01 | 0.90912043E 02 0.23355967E-02 |
| 1926.75 309.00 | -0.92918558E 01 0.16118149E 04 0.22053424E 07 | -0.13930492E 02 0.33663455E 02 0.15215451E 00 | 0.15643860E 03 0.99460799E 05 -0.10106974E 01 | 0.51685819E 02 0.20772820E 04 0.28713317E 03 | -0.89955825E 02 0.12067089E 01 | 0.90845967E 02 0.23414010E-02 |
| 1927.25 309.50 | -0.92918558E 01 0.16117471E 04 0.22070325E 07 | -0.13930488E 02 0.33662039E 02 0.15191844E 00 | 0.13068300E 03 0.99765946E 05 -0.10106549E 01 | 0.51620670E 02 0.20836552E 04 0.28730058E 03 | -0.89955861E 02 0.12097058E 01 | 0.90916847E 02 0.23472160E-02 |
| 1927.75 310.00 | -0.92918558E 01 0.16117175E 04 0.22087590E 07 | -0.13930492E 02 0.33661420E 02 0.15168329E 00 | 0.10477500E 03 0.10007368E 06 -0.10106363E 01 | 0.51555871E 02 0.20900822E 04 0.28746898E 03 | -0.89955915E 02 0.12127264E 01 | 0.90853929E 02 0.23530768E-02 |
| 1928.25 310.50 | -0.92918562E 01 0.16116717E 04 0.22104700E 07 | -0.13930488E 02 0.33660464E 02 0.15144858E 00 | 0.78943199E 02 0.10038125E 06 -0.10106076E 01 | 0.51491123E 02 0.20965061E 04 0.28763688E 03 | -0.89955957E 02 0.12157436E 01 | 0.90911479E 02 0.23589313E-02 |
| 1928.75 311.00 | -0.92918559E 01 0.16116107E 04 0.22121610E 07 | -0.13930492E 02 0.33659189E 02 0.15121500E 00 | 0.53263800E 02 0.10068780E 06 -0.10105693E 01 | 0.51426623E 02 0.21029084E 04 0.28780379E 03 | -0.89955984E 02 0.12187490E 01 | 0.90918571E 02 0.23647627E-02 |
| 1929.25 311.50 | -0.92918559E 01 0.16115432E 04 0.22138424E 07 | -0.13930488E 02 0.33657779E 02 0.15098229E 00 | 0.27660600E 02 0.10099418E 06 -0.10105270E 01 | 0.51362325E 02 0.21093074E 04 0.28797021E 03 | -0.89956127E 02 0.12217511E 01 | 0.90866383E 02 0.23705877E-02 |

TABLE V.- REENTRY TRAJECTORY PARAMETERS - Concluded

| Flight elapsed time, sec Elapsed time from entry point, sec Dynamic pressure, N/m Reynolds number | | Longitude, deg | Altitude, m | Earth relative velocity, m/sec | Earth relative flight-path angle, deg | Earth relative heading angle, deg |
|--|---|---|---|--|---|---|
| | Dynamic pressure, lb/ft ² | Atmospheric pressure, N/m ² | Atmospheric pressure, lb/ft ² | Atmospheric density, kg/m ³ | Atmospheric density, slug/ft ³ | |
| | • . | Mach number | Acceleration, g units | Temperature, ^O K | | |
| 1929.75 312.00 | -0.92918561E 01 0.16115047E 04 0.2215555CE 07 | -0.13930488E 02 0.33656977E 02 0.15075007E 00 | 0.19050000E 01 0.10130315E 06 -0.10105029E 01 | 0.51298233E 02 0.21157604E 04 0.28813762E 03 | -0.89956161E 02 0.12247768E 01 | 0.90861444E 02 0.23764584E-02 |
| 1929.79 312.04 | -0.92918559E 01 0.16114927E 04 0.22156751E 07 | -0.13930488E 02 0.33656725E 02 0.15073249E 00 | 0.00000000E-38 0.10132603E 06 -0.10104953E 01 | 0.51293352E 02 0.21162381E 04 0.28815000E 03 | -0.89956120E 02 0.12250007E 01 | 0.90904819E 02 0.23768929E-02 |



I I I

Figure 1.- Lift-off of Project Fire II space vehicle.

L-66-1176

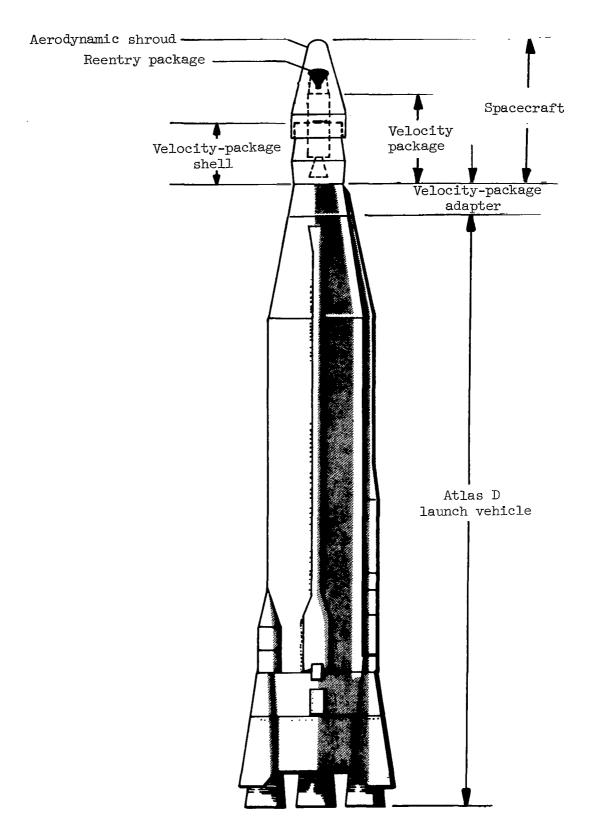
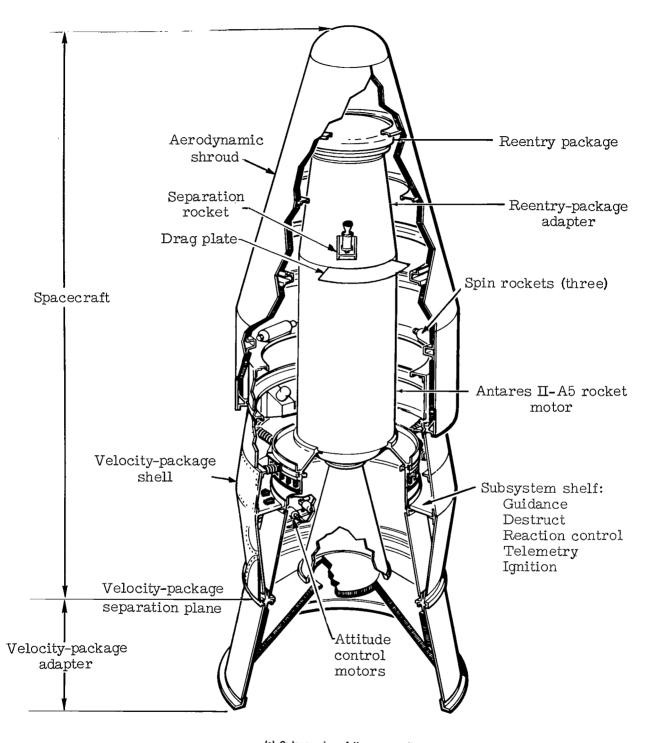
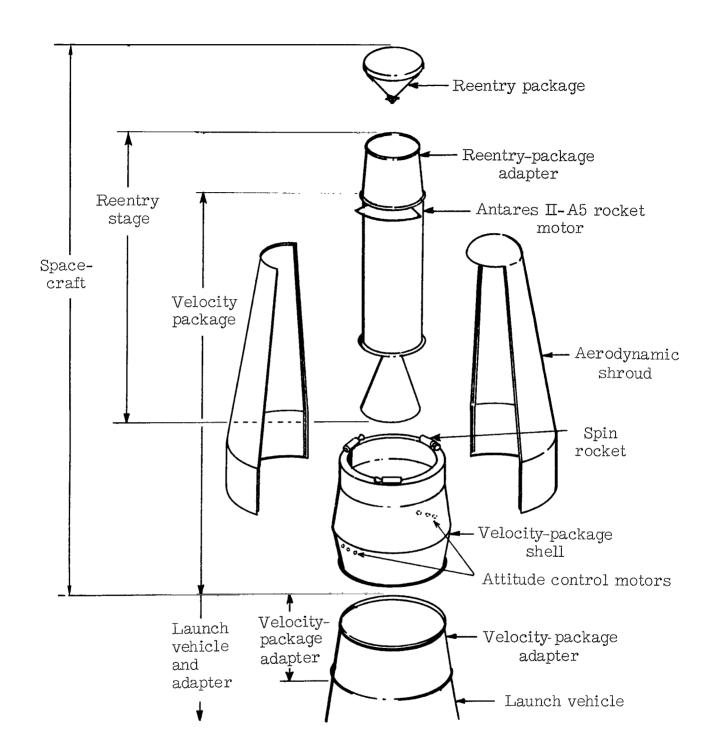


Figure 2.- Project Fire space vehicle.



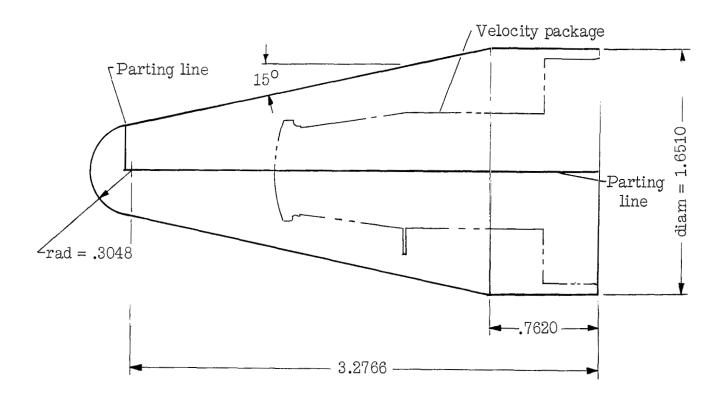
(a) Cutaway view of the spacecraft.

Figure 3.- General spacecraft configuration.



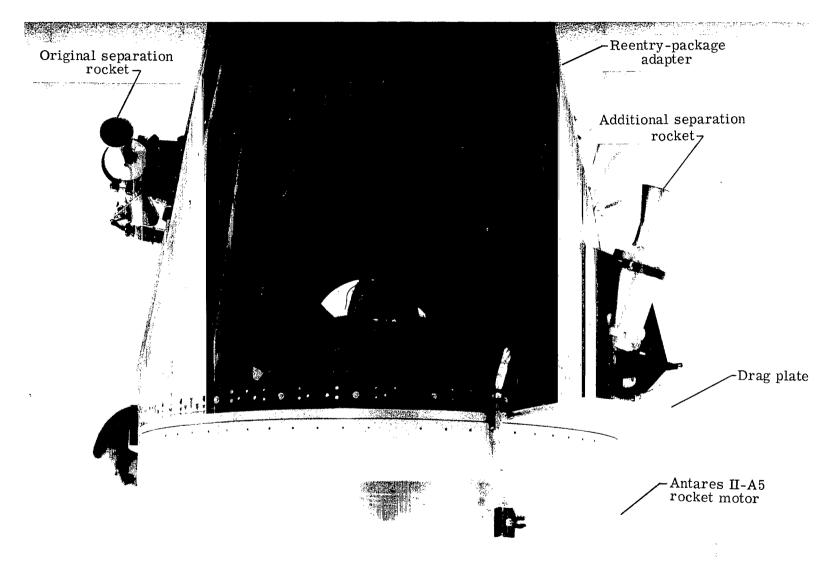
(b) Major components of the spacecraft.

Figure 3.- Continued.



(c) Sketch of aerodynamic shroud. All dimensions are in meters.

Figure 3.- Continued.



(d) Photograph showing the location of the separation rockets and the drag plate.

L-66-1177

Figure 3.- Concluded.

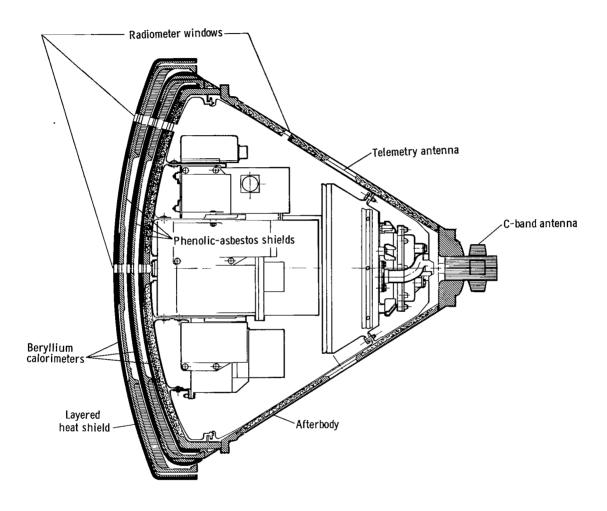


Figure 4.- Sectional sketch of reentry package showing general arrangement of forebody calorimeters and heat shields.

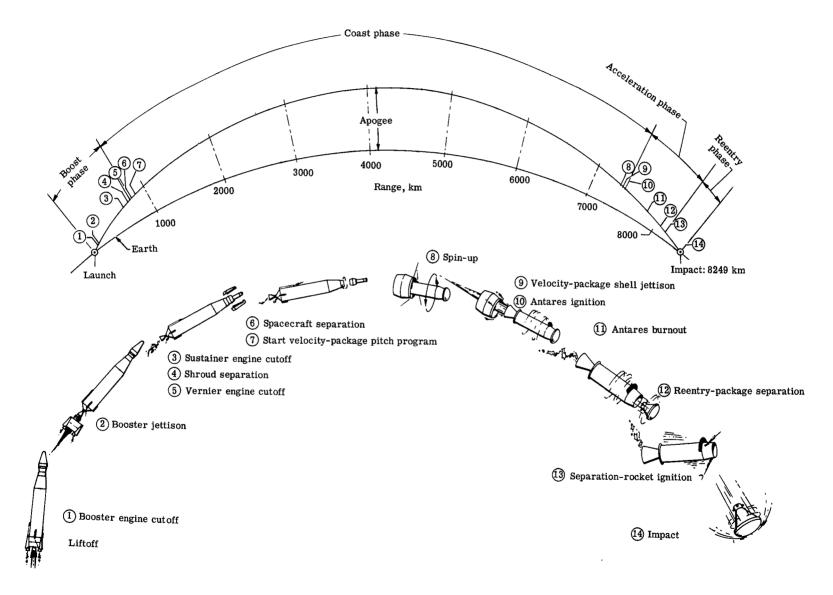


Figure 5.- Sequence of events in Project Fire flight II.

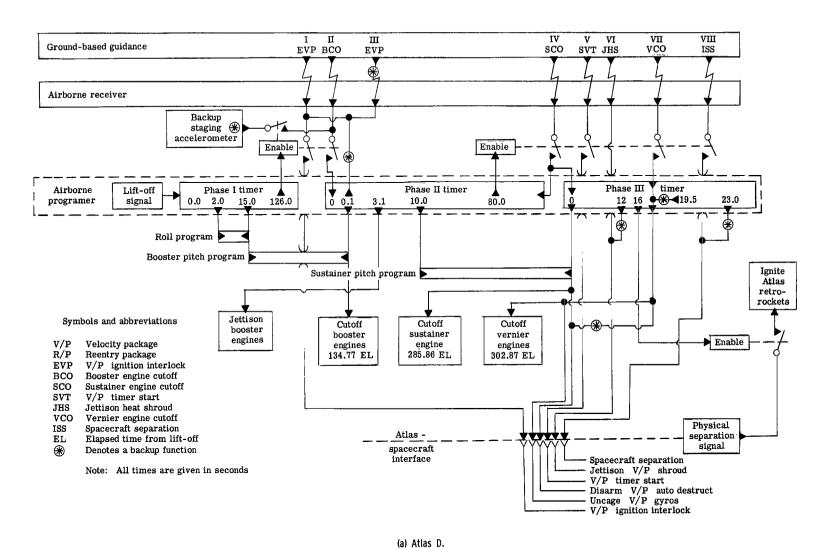
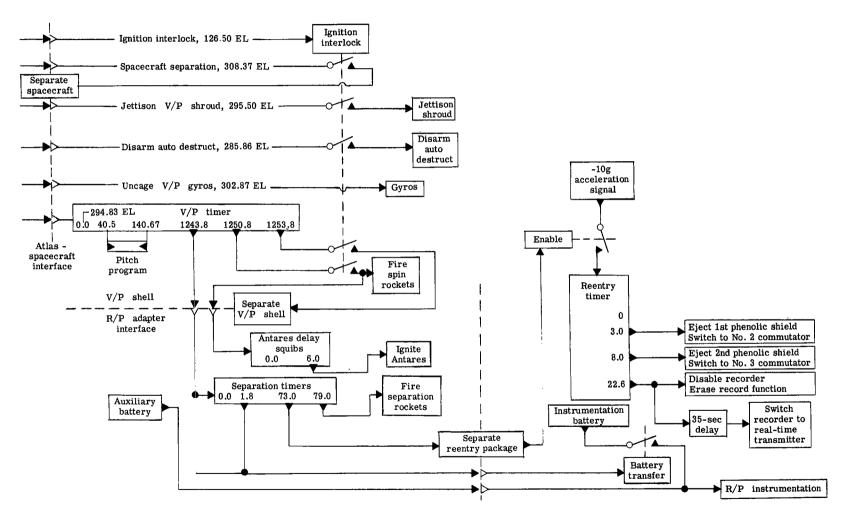
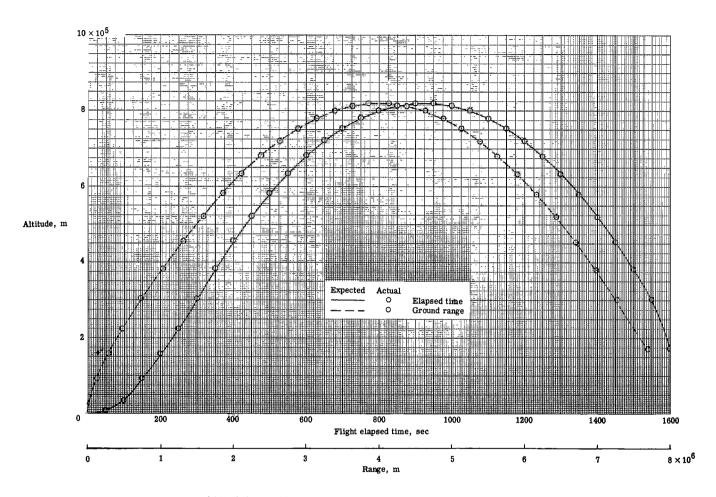


Figure 6.- Functional diagram of Project Fire sequence of events.



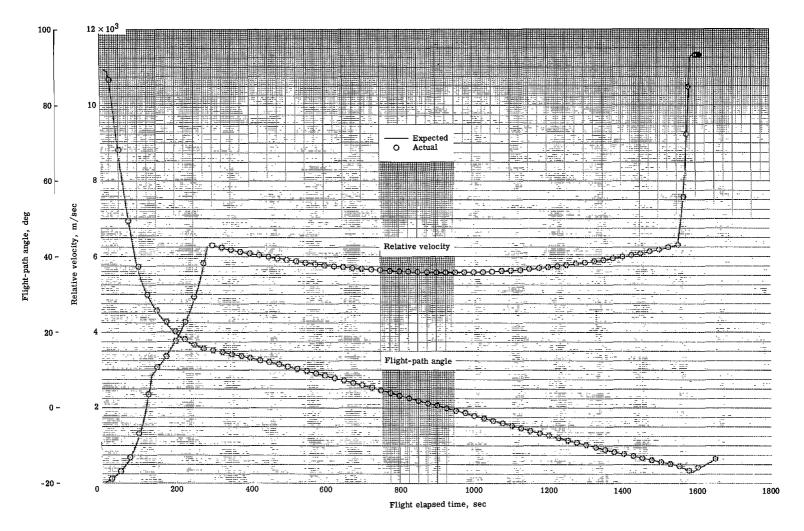
(b) Spacecraft.

Figure 6.- Concluded.



(a) Variation of altitude with ground range and flight elapsed time.

Figure 7.- Trajectory parameters as determined from Eastern Test Range tracking data.



(b) Variation of velocity and flight-path angle with elapsed time.

Figure 7.- Concluded.

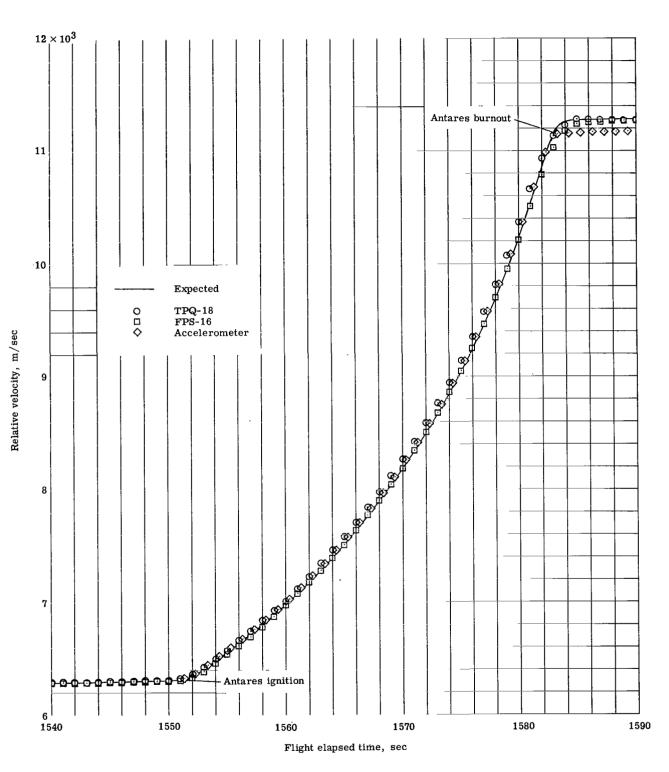
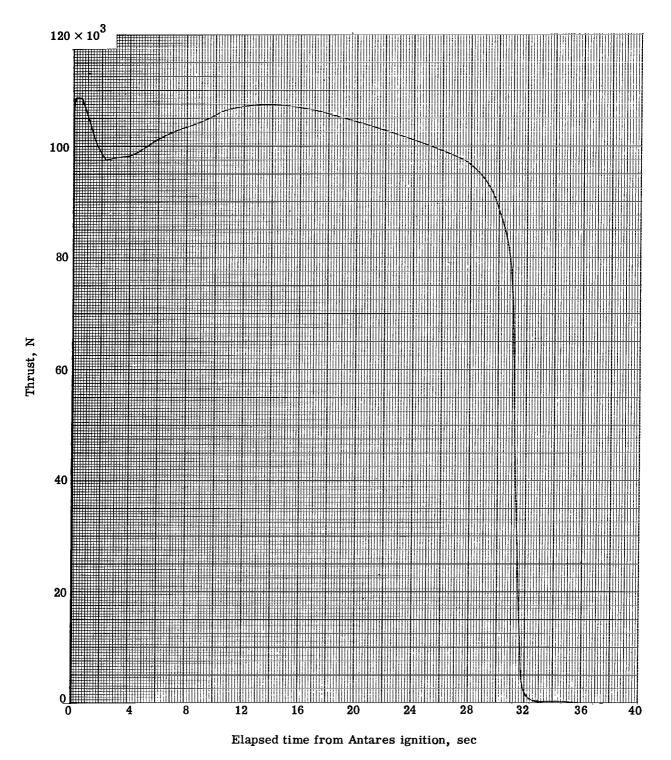
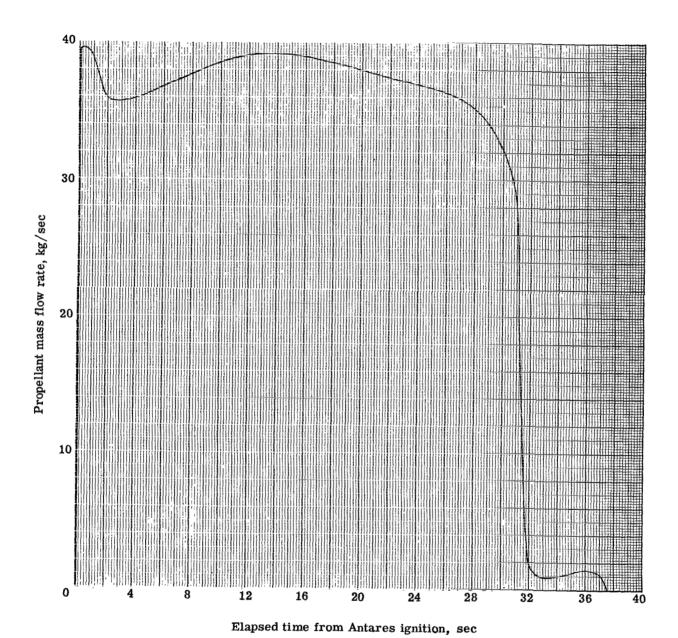


Figure 8.- Variation of velocity with time during burning of Antares 11-A5.



(a) Variation of thrust with time.

Figure 9.- Performance parameters for Antares II-A5.



....

(b) Variation of mass flow rate with time.

Figure 9.- Concluded.

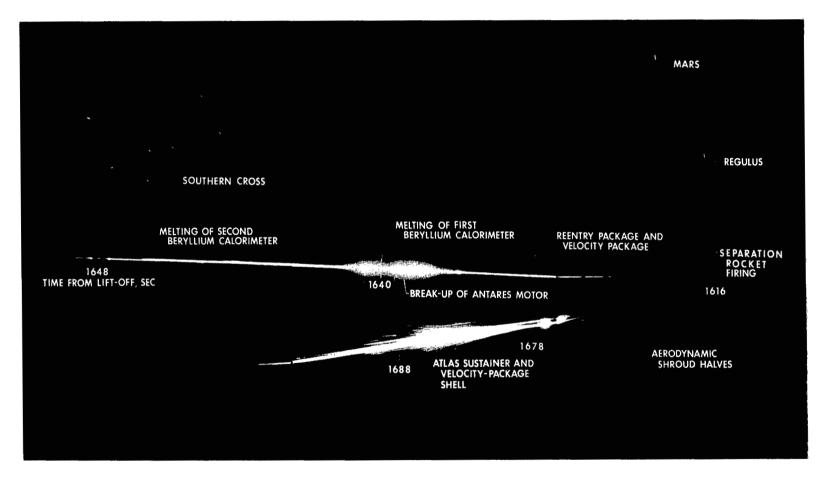
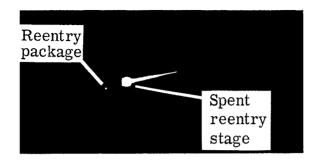
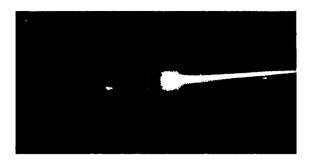


Figure 10.- Montage photograph of Project Fire flight II reentry viewed from Ascension Island. L-66-3235



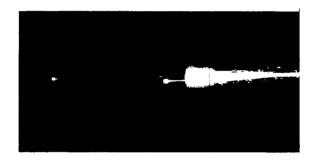
Time = 1634.5 sec



Time = 1637.1 sec



Time = 1637.8 sec



Time = 1639.3 sec

Figure 11.- Four representative frames of motion-picture film taken during reentry. L-66-II78

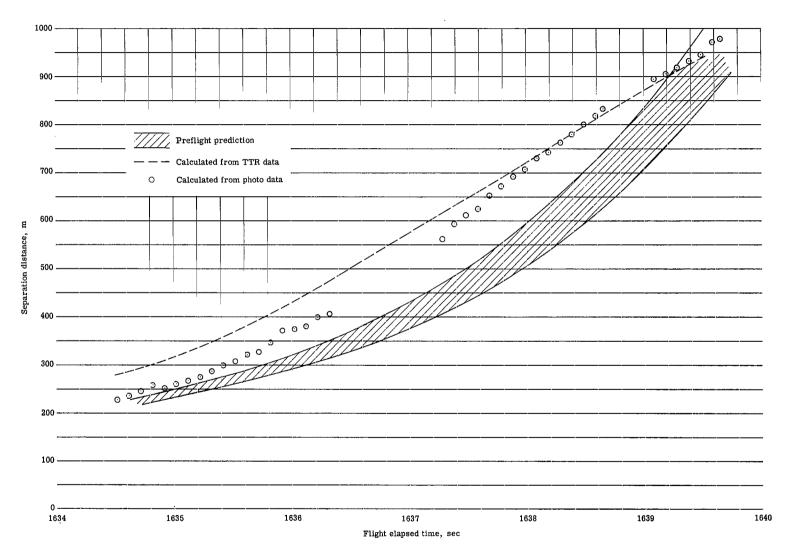


Figure 12.- Variation of longitudinal separation between reentry package and spent reentry stage with time.

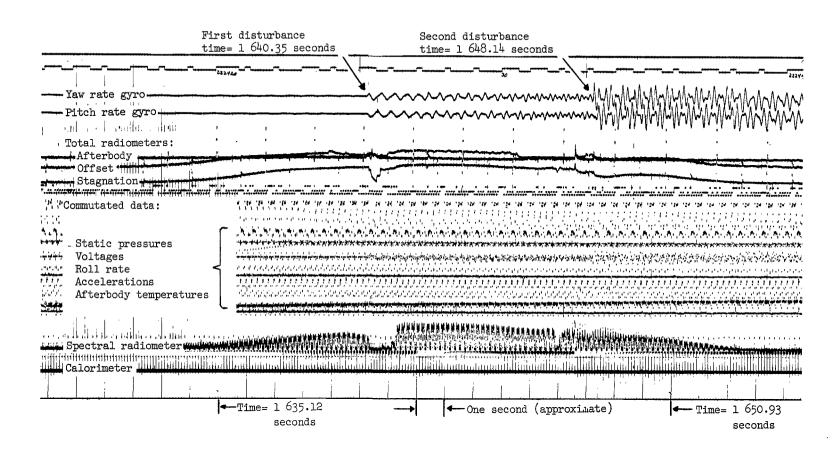


Figure 13.- Example of telemetered data received by Ascension Island telemetry receiver (TLM-18) site. After emergence from blackout.

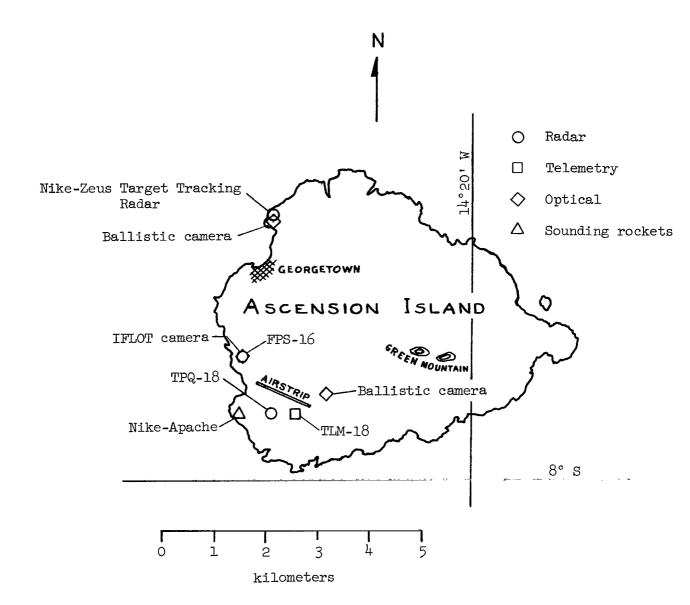
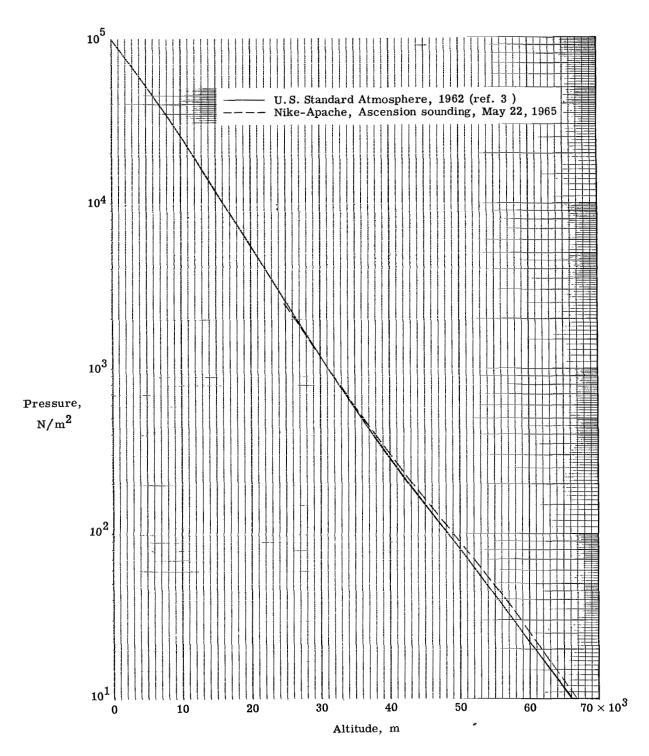
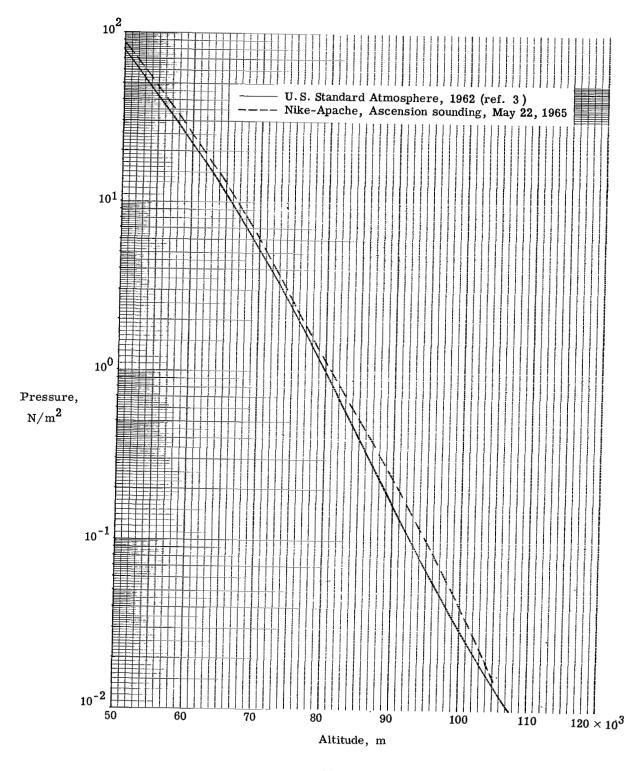


Figure 14.- Major data sources on Ascension Island.



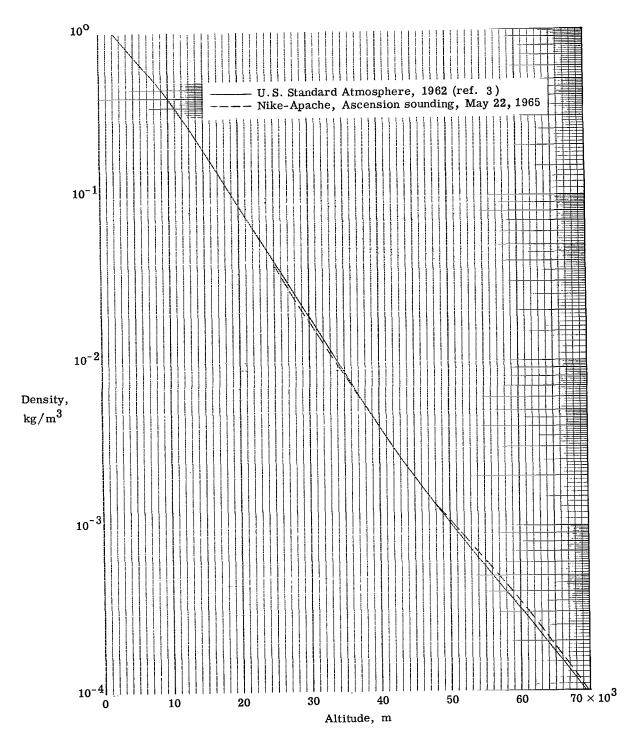
(a) Variation of pressure with altitude. Sea-level pressure = 1.012 \times 10⁵ N/m².

Figure 15.- Ambient atmospheric conditions obtained from sounding rockets at Ascension Island.



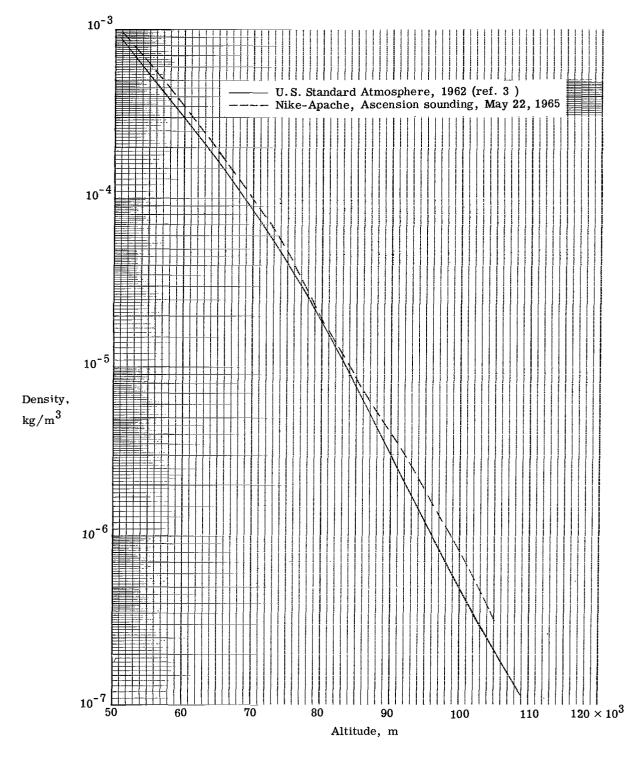
(a) Concluded.

Figure 15.- Continued.



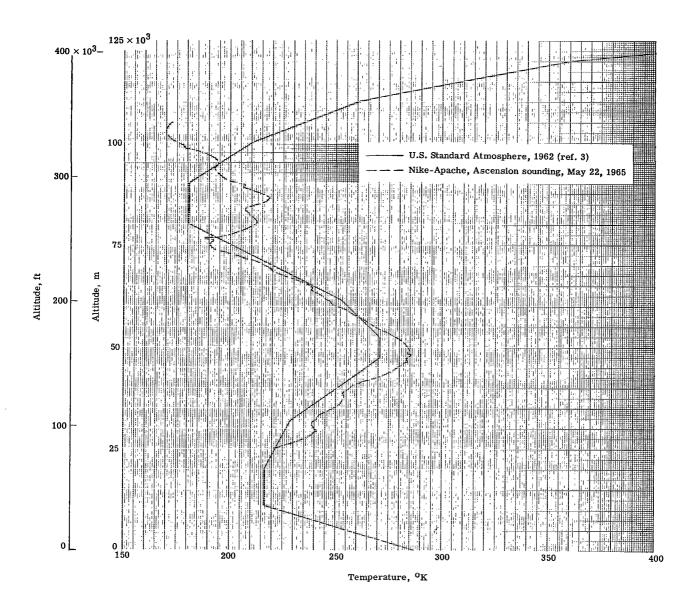
(b) Variation of density with altitude. Sea-level density = 1.178 kg/m 3 .

Figure 15.- Continued.



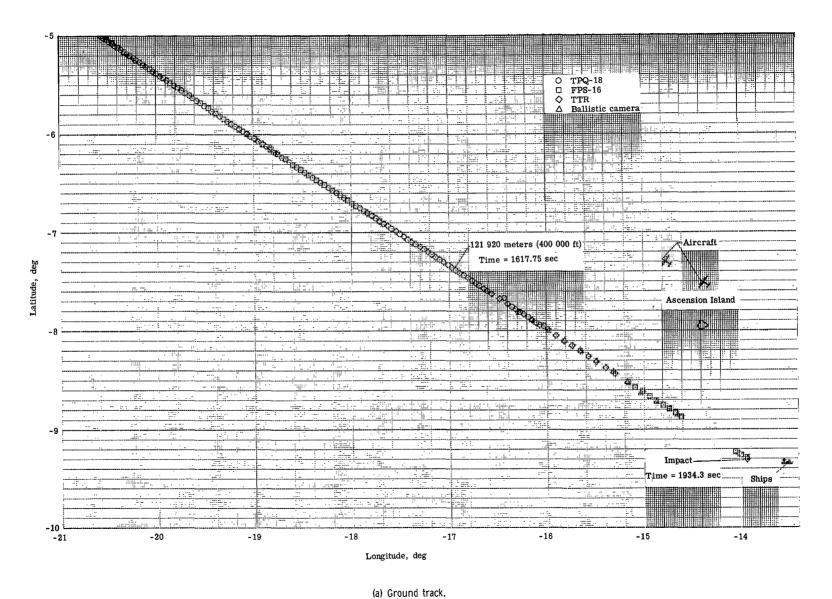
(b) Concluded.

Figure 15.- Continued.



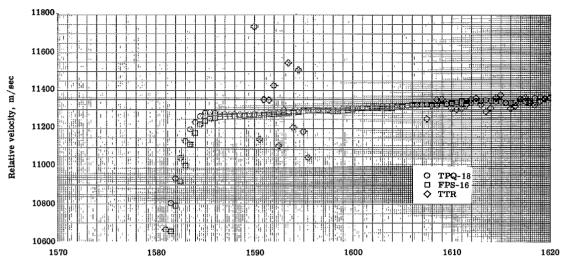
(c) Variation of temperature with altitude. Sea-level temperature = 297.6° K.

Figure 15.- Concluded.

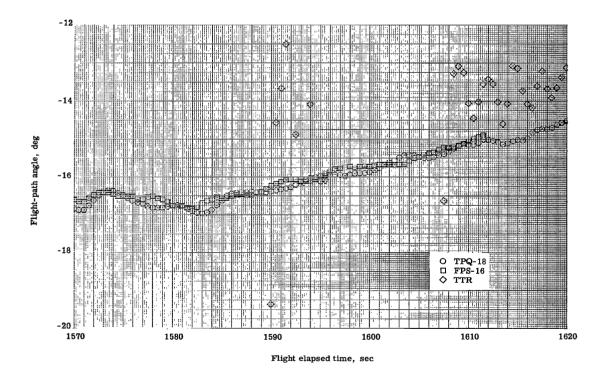


(4) 0.04110 1.4011

Figure 16.- Comparison of flight trajectory obtained from Ascension Island trackers.



Flight elapsed time, sec



(b) Variation of velocity and flight-path angle with time.

Figure 16.- Concluded.

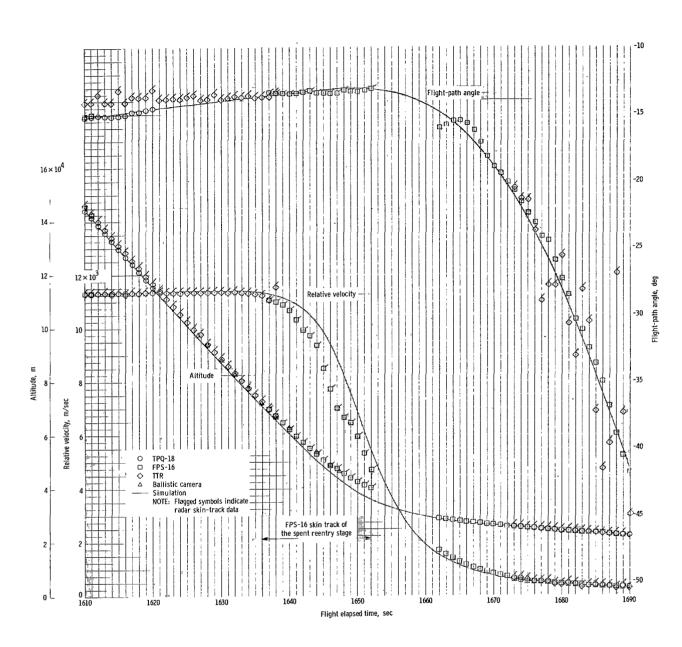


Figure 17.- Comparison of the simulation reentry trajectory parameters with those obtained from Eastern Test Range tracking data.

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-NATIONAL AERONAUTICS AND SPACE ACT OF 1958

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